

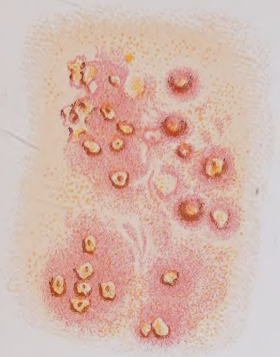
COUNTWAY LIBRARY



HC 4NG6 Z

27 A. 99

E. Wigglesworth



L. Pustules



E. Tubercles



G. Tumors.



A. Macules.



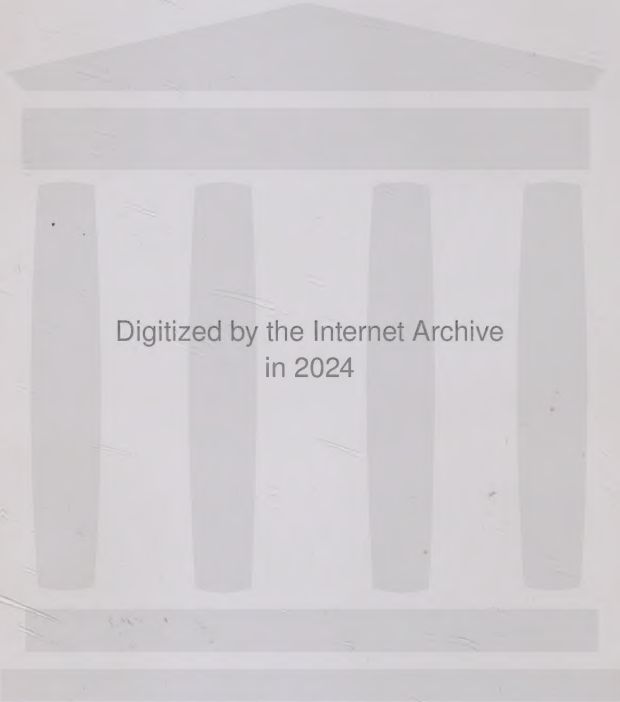
B. Papules.



C. Vesicles



D. Blebs.



Digitized by the Internet Archive
in 2024

HANDBOOK
OF THE
DIAGNOSIS AND TREATMENT
OF
SKIN DISEASES.

BY
ARTHUR VAN HARLINGEN, M.D.,
PROFESSOR OF DISEASES OF THE SKIN IN THE PHILADELPHIA POLYCLINIC AND COL-
LEGE FOR GRADUATES IN MEDICINE; CONSULTING PHYSICIAN TO THE DIS-
PENSARY FOR SKIN DISEASES, PHILADELPHIA; PHYSICIAN
TO THE HOWARD HOSPITAL, DEPARTMENT
OF DERMATOLOGY.

WITH TWO COLORED PLATES.

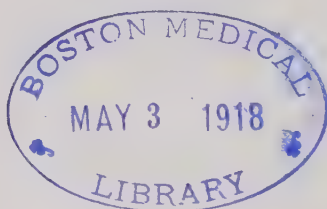
PHILADELPHIA:
P. BLAKISTON, SON & CO.,
1012 WALNUT STREET.
1884.

1680

Entered according to Act of Congress, in the year 1884, by

P. BLAKISTON, SON & CO.,

In the Office of the Librarian of Congress, at Washington, D. C.



TO
JOHN MARTIN VAN HARLINGEN, SR.

THIS BOOK IS
AFFECTIONATELY DEDICATED

BY HIS SON,
THE AUTHOR.

PREFACE.

In writing this book I have had in mind the wants of the practitioner, and I have tried to make it useful as a work of ready reference. For this reason I have given space to the description, diagnosis and treatment of the various affections of the skin as met with in practice, touching lightly on questions of etiology, and omitting all reference to pathological anatomy. And this, not because I undervalue such knowledge, but because it does not come within the plan of a work not intended for students of dermatology. For the same reason, the commoner affections and those giving most distress and annoyance to the patient have been treated at full length, while the rarer diseases and those causing little trouble have been dealt with briefly. The alphabetical plan of arrangement has also been adopted, with the object of ready reference in view. In the description, and chiefly in the definition of the various diseases, I have made frequent use of Duhring's well known Treatise, to which and to its author I desire to offer thankful acknowledgment at this time.

129 South Fifteenth St., July, 1884.

CONTENTS.

	PAGE
INTRODUCTION.....	9
SYMPTOMATOLOGY	9
Primary lesions of the skin.....	9
Secondary lesions of the skin.....	10
CLASSIFICATION OF DISEASES OF THE SKIN.....	10
DESCRIPTION OF THE VARIOUS DISEASES OF THE SKIN IN ALPHABETICAL ORDER.....	11
Acarus Folliculorum.....	11
Acne	11
— rosacea.....	25
Addison's Keloid, <i>see</i> Morphea.	
Ainhum.....	29
Albinism.....	29
Alopecia.....	29
— Areata.....	33
Angioma, <i>see</i> Nævus.	
Anidrosis	38
Aniline Dyes, <i>see</i> Dermatitis.	
Anthrax	39
Argyria, <i>see</i> Chloasma.	
Army Itch, <i>see</i> Scabies.	
Arnica, Skin Diseases from Tincture of, <i>see</i> Dermatitis.	
Artificial Eruptions, <i>see</i> Feigned Eruptions.	
Atrophia Cutis, <i>see</i> Atrophy of Skin.	
— of Skin.....	41
— of Hair.....	42
— of Nail.....	43
Baldness, <i>see</i> Alopecia.	
Barbadoes Leg, <i>see</i> Elephantiasis.	
Baker's Itch, <i>see</i> Eczema of the hands.	
Barber's Itch, <i>see</i> Tinea Sycosis.	
Bed-bug.....	43
Bloody Sweat, <i>see</i> Purpura.	
Body Louse, <i>see</i> Pediculosis corporis.	
Boil, <i>see</i> Furuncle.	
Bromidrosis.....	44
Bromine eruption, <i>see</i> Dermatitis Medicamentosa.	
Callositas.....	44
Cancer of the Skin, <i>see</i> Carcinoma, Epithelioma and Sarcoma.	
Canities.....	45
Carbuncle, <i>see</i> Anthrax.	

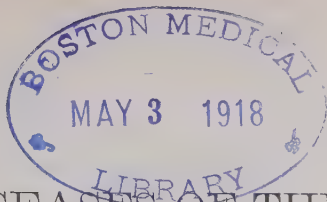
	PAGE
Carcinoma	46
Chaps, <i>see</i> Eczema fissum and of hands.	
Cheiro-pompholyx, <i>see</i> Dysidrosis.	
Chilblain, <i>see</i> Dermatitis congelationis.	
Chloasma.....	47
Chromidrosis.....	49
Clavus.....	49
Comedo.....	51
Condyloma, <i>see also</i> Verruca.....	53
Corns, <i>see</i> Clavus.	
Cornu cutaneum.....	53
Crab Louse, <i>see</i> Pediculosis pubis.	
Crusta Lactea, <i>see</i> Eczema.	
Cyst, <i>see</i> Sebaceous Cyst.	
Dandruff, <i>see</i> Pityriasis capitis.	
Dermatitis.....	54
—— Traumatica.....	54
—— Venenata.....	54
—— Congelationis.....	57
—— Calorica.....	59
—— Gangrenosa.....	59
—— Herpetiformis.....	60
—— Medicamentosa.....	61
—— Exfoliativa.....	62
Dermatolysis.....	63
Dermatosyphilis, <i>see</i> Syphilis of the Skin.	
Dissection Wound, or Tubercle.....	63
Driving in Eruptions.....	64
Dysidrosis.....	65
Ecthyma.....	66
Eczema.....	67
—— in Infants.....	119
—— marginatum, <i>see</i> Tinea circinata.	
Elastic Skin Man, <i>see</i> Dermatolysis.	
Elephantiasis.....	122
—— Græcorum, <i>see</i> Lepra.	
Ephidrosis cruenta, <i>see</i> Purpura.	
Epithelioma of the Skin.....	125
Eruptions, Feigned, Factitious, or Artificial, <i>see</i> Feigned Eruptions.	
—— medicinal, <i>see</i> Dermatitis Medicamentosa.	
Erythema.....	130
—— gangrenosum, <i>see</i> Dermatitis gangrenosa.	
—— multiforme.....	135
—— nodosum.....	137
Excoriations, Neurotic, <i>see</i> Neurotic Excoriations.	
Exfoliative Dermatitis, <i>see</i> Dermatitis exfoliativa.	
Farcy, <i>see</i> Glanders.	
Favus, <i>see</i> Tinea favosa.	
Feigned eruptions.....	138

Fibroma Molluscum, <i>see</i> Molluscum fibrosum.	
Filaria Medinensis, <i>see</i> Guinea-worm Disease.	
—— Sanguinis Hominis.....	139
Fish-skin Disease, <i>see</i> Ichthyosis.	
Fissures.....	139
Frambœsia	140
Freckle, <i>see</i> Lentigo.	
Furuncle.....	141
Gangrene of the Skin, <i>see</i> Dermatitis gangrenosa.	
Glanders.....	145
Glossy Skin, <i>see</i> Atrophy of the Skin.	
Graying of the Hair, <i>see</i> Canities.	
Grocer's Itch.....	145
Guinea-worm Disease.....	145
Gumma, <i>see</i> Syphilis of the Skin.	
Hæmatidrosis, <i>see</i> Purpura.	
Hair, Diseases of the, <i>see</i> Atrophy of the Hair, Hirsuties, Alopecia, Canities.	
Heat, Prickly, <i>see</i> Miliaria.	
Hemiatrophia Facialis, <i>see</i> Atrophy of the Skin.	
Hereditary Syphilis, Skin Diseases in, <i>see</i> Skin Diseases in Hereditary Syphilis.	
Herpes.....	146
—— Circinatus, <i>see</i> Herpes iris and Tinea circinata.	
—— Gestationis.....	149
—— Iris.....	150
—— Tonsurans, <i>see</i> Tinea tonsurans.	
—— Zoster.....	151
Hirsuties, <i>see</i> Hypertrophy of the Hair.	
Hives	154
Hordeolum.....	155
Horn, cutaneous.....	155
Hydroa, <i>see</i> Herpes iris.	
Hyperidrosis.....	156
Hyperæsthesia of the Skin.....	160
Hypertrophy of the Skin.....	161
—— of the Hair.....	161
—— of the Nail.....	163
Ichthyosis.....	163
—— Hystrix	166
Impetigo.....	166
—— Contagiosa.....	168
—— Herpetiformis, <i>see</i> Dermatitis herpetiformis.	
Infantile Syphilis, <i>see</i> Skin Diseases in Hereditary Syphilis.	
Intertrigo, <i>see</i> Erythema intertrigo.	
Iodine Eruptions, <i>see</i> Dermatitis Medicamentosa.	
Itch, Army Itch, <i>see</i> Scabies.	
Keloid.....	170
—— of Addison, <i>see</i> Morphœa.	
Keratosi Pigmentosa, <i>see</i> Verruca senilis.	
—— Pilaris.....	172

	PAGE
Lentigo.....	172
Lepra.....	172
Leprosy, <i>see</i> Lepra.	
Leucoderma, Congenital, <i>see</i> Albinism.	
—— Acquired, <i>see</i> Vitiligo.	
Lice, <i>see</i> Pediculosis.	
Lichen Pilaris, <i>see</i> Keratosis pilaris.	
—— Planus, <i>see</i> Lichen ruber.	
—— Ruber.....	178
—— Scrofulosus.....	180
—— Simplex, <i>see</i> Eczema.	
—— Tropicus, <i>see</i> Miliaria.	
Lineæ Albicantes, <i>see</i> Atrophy of the Skin.	
Lip, Fissured, <i>see</i> Eczema of the Lip.	
Liver Spots.....	181
Louse, <i>see</i> Pediculosis.	
Lupus Erythematosus.....	181
—— Exedens.....	185
—— Vulgaris.....	185
Maculæ Atrophicæ, <i>see</i> Atrophy of the Skin.	
Malignant Papillary Dermatitis, <i>see</i> Paget's Disease.	
—— Pustule.....	190
Medicinal Eruptions, <i>see</i> Dermatitis Medicamentosa.	
Melanoderma, <i>see</i> Chloasma.	
Mentagra, <i>see</i> Sycosis.	
Miliaria.....	191
Milium.....	193
Mole, Pigmentary.....	193
Molluscum, Contagiosum, <i>see</i> Molluscum Epitheliale.	
—— Epitheliale.....	193
—— Fibrosum.....	194
Mother's Mark, <i>see</i> Nævus.	
Morphœa.....	196
Nævus.....	196
—— Pigmentosus, <i>see</i> Mole, pigmentary.	
Nails, Diseases of.....	198
Neoplasm, Inflammatory Fungoid, <i>see</i> Sarcoma.	
Nettle Rash, <i>see</i> Urticaria.	
Neuralgia of the Skin, <i>see</i> Hyperæsthesia.	
Neuroma Cutis.....	198
Neurotic Excoriations.....	198
Nipple, Eczema of, <i>see</i> Eczema, also Paget's Disease of the Nipple.	
Nits, <i>see</i> Pediculosis.	
Noli-me Tangere, <i>see</i> Lupus Vulgaris.	
Odor of the Human Body, <i>see</i> Bromidrosis.	
Onychauxis, <i>see</i> Hypertrophy of the Nails.	
Onychia.....	199
—— Syphilitic, <i>see</i> Syphilis of the Nail.	
Onycho-gryphosis, <i>see</i> Hypertrophy of the Nail.	

Pachydermia, <i>see</i> Elephantiasis.	
Paget's Disease of the Nipple.....	199
Parasitic Sycosis, <i>see</i> Tinea Sycosis.	
Paronychia.....	200
Pediculosis.....	200
—— Capitis.....	201
—— Corporis.....	202
—— Pubis.....	203
Peliosis Rheumatica, <i>see</i> Purpura.	
Pellagra.....	204
Pemphigus.....	204
—— Syphiliticus, <i>see</i> Syphilis of the Skin.	
Perforating Ulcer of the Foot.....	207
Petechiæ.....	207
Phosphorescent Sweat.....	207
Phthiriasis, <i>see</i> Pediculosis.	
Piebald Skin, <i>see</i> Vitiligo.	
Pigmentary Mole and Nævus, <i>see</i> Mole.	
Pityriasis Simplex (capitis).....	207
—— Rosea.....	210
—— Pilaris, <i>see</i> Keratosis Pilaris.	
—— Rubra.....	211
—— Versicolor, <i>see</i> Tinea Versicolor.	
Plica Polonica.....	212
Pompholyx, <i>see</i> Dysidrosis.	
Porcupine Disease, <i>see</i> Ichthyosis Hystrix.	
Porriço.....	213
Port-Wine Mark, <i>see</i> Nævus.	
Prickly Heat, <i>see</i> Miliaria.	
Prurigo.....	213
—— Senilis, <i>see</i> Pruritis and Pediculosis corporis.	
Pruritus.....	214
—— Hiemalis.....	221
Psoriasis.....	222
Purpura.....	230
Quinine Eruption, <i>see</i> Dermatitis Medicamentosa.	
Rhus Poisoning, <i>see</i> Dermatitis Venenata.	
Ringworm, <i>see</i> Tinea circinata.	
Rodent Ulcer, <i>see</i> Epithelioma.	
Rupia, <i>see</i> Syphilis of the Skin.	
Sapo Viridis.....	233
Sarcoma of the Skin.....	233
Scabies.....	234
Sclerema neonatorum.....	236
Scleroderma.....	237
Scrofuloderma.....	237
Scurvy, Land, <i>see</i> Purpura.	
Sebaceous Cyst.....	240
Seborrhœa.....	240

Shingles, <i>see</i> Herpes Zoster.	
Smegma, <i>see</i> Seborrhœa.	
Strophulus, <i>see</i> Miliaria.	
Stye, <i>see</i> Hordeolum.	
Sudamen.....	244
Sweat, Bloody, <i>see</i> Purpura.	
—— Colored, <i>see</i> Chromidrosis.	
—— Phosphorescent, <i>see</i> Phosphorescent Sweat.	
Sweating, Excessive, <i>see</i> Hyperidrosis.	
Sycosis.....	245
—— Non-parasitica, <i>see</i> Sycosis.	
—— Parasitica, <i>see</i> Tinea Sycosis.	
Syphilis of the Skin.....	248
Skin Diseases in Hereditary Syphilis.....	255
Syphiloderma, <i>see</i> Syphilis of the Skin.	
Telangiectasis, <i>see</i> Nævus.	
Tetter.....	259
Tinea.....	259
—— Circinata.....	259
—— Decalvans.....	260
—— Tonsurans.....	261
—— Kerion.....	263
—— Sycosis.....	263
—— Favosa.....	264
—— Versicolor.....	266
Tooth Rash, <i>see</i> Eczema in children.	
Ulcer.....	268
—— Rodent, <i>see</i> Epithelioma.	
Uridrosis.....	268
Urticaria.....	268
Vaccination, Skin Diseases Following.....	273
Vegetations, <i>see</i> Verruca and Syphilis, Skin diseases due to.	
Venereal Wart, <i>see</i> Verruca.	
Vernix Caseosa, <i>see</i> Seborrhœa.	
Verruca.....	274
—— Necrogenica, <i>see</i> Dissection Wound.	
Vitiligo.....	276
Wart, <i>see</i> Verruca.	
Wen, <i>see</i> Sebaceous Cyst.	
Xanthelasma, <i>see</i> Xanthoma.	
Xanthoma.....	277
Xeroderma, <i>see</i> Ichthyosis and Atrophy of the Skin.	
Yaws, <i>see</i> Framboesia.	
Zoster-Zona, <i>see</i> Herpes Zoster.	
APPENDIX—DIET IN DISEASES OF THE SKIN.....	279



DISEASES OF THE SKIN.

INTRODUCTION.

Symptomatology. In order to gain a satisfactory conception of the nature of any given skin disease in itself considered, we must have a clear idea of the character and appearance of the individual lesions which go to make up the objective picture known as the eruption. These are of two kinds, primary and secondary.

Primary Lesions of the Skin. These are such as show themselves as the original forms of disease. They are: *macules, papules, vesicles, blebs, pustules, wheals, tubercles* and *tumors*.

Macules are variously sized, shaped and colored portions of altered skin, unaccompanied by elevation or depression. The common freckle is an example of this lesion.

Papules are circumscribed, solid elevations of the skin, varying in size from a pin head to a split pea. The pimply eruption of acne, when the lesions are solid and without any pus, is a good example of a papular eruption.

Vesicles are circumscribed, rounded elevations of the epidermis, varying in size from a pin point to a split pea, containing a clear, serous fluid. The watery pimples seen in the rash caused by exposure to poison ivy are typical examples of vesicles.

Blebs are irregularly shaped elevations of the epidermis, varying in size from a split pea to a goose-egg, containing

a clear or opaque fluid. The raised watery blisters of a burn are blebs.

Pustules are circumscribed, rounded elevations of the epidermis, varying in size from a pin point to a finger nail, containing pus. The pimples of acne, when these show a mattery head, are pustules.

Wheals are firm, flat, elongated or rounded, slightly raised elevations, which come and go quickly. The lesions of "nettle rash" or "hives" are typical wheals.

Tubercles are firmly seated, solid elevations of the skin, varying in size from a split pea to a cherry. Small wens are tubercles.

Tumors are variously sized, shaped and constituted, firm or soft prominences. Large wens are tumors.

Secondary Lesions of the Skin. These are such as exist either as the result of primary lesions or from other causes. They are: *crusts*, *scales*, *excoriations*, *fissures*, *ulcers* and *scars*.

Crusts are effete masses of dried material composed of the products of disease of the skin.

Scales are dry laminated masses of epidermis which have separated from the tissues beneath.

Excoriations are losses of tissue occurring in the superficial layers of the skin.

Fissures are linear wounds having their seat in the epidermis or corium.

Ulcers are irregularly sized and shaped excavations of the cutaneous tissues, the result of disease.

Scars are new formations occupying the place of former normal tissue.

Classification of Diseases of the Skin. The classification of diseases of the skin now most generally employed by dermatologists is that of Hebra, which with slight modifications has been adopted by the American Dermatological Association. It includes the following nine classes:—

I. **Disorders of the Glands** ; (1) of the sweat glands ; (2) of the sebaceous glands.

II. **Inflammations.**

III. **Hemorrhages.**

IV. **Hypertrophies** ; (1) of pigment ; (2) of epidermis and papillary layers ; (3) of corium.

V. **Atrophies.**

VI. **New Growths** ; (1) of connective tissue ; (2) of vessels ; (3) of granulation tissue.

VII. **Ulcers.**

VIII. **Neuroses.**

IX. **Parasitic Affections** ; (1) vegetable ; (2) animal.*

DESCRIPTION OF THE VARIOUS DISEASES OF THE SKIN, IN ALPHABETICAL ORDER.

Acarus Folliculorum (ix), more properly *Demodex Folliculorum*, is a minute, worm-like parasite, not unfrequently found in the sebaceous follicles. It gives rise to no symptoms whatever of disease, but is occasionally pictured in quack advertisements, to frighten the ignorant. The worm-like plugs of altered sebaceous matter which can be expressed from greasy skins, particularly on the face and nose, are occasionally mistaken for parasites, and are called "flesh worms" or "grubs." (See *Comedo*.)

Acne (iii) is an inflammatory, usually chronic, disease of the sebaceous glands, characterized by the formation of papules, tubercles or pustules, or a combination of these lesions, occurring for the most part about the face. It may occur alone or in connection with other affections of the sebaceous glands, as comedo and seborrhœa. The lesions

* In the following pages, the various diseases being arranged alphabetically, no system of classification will be possible, but a figure designating the class to which each disease belongs will be placed after its title.

are of various sizes, from a pin's head to a large split pea, and are commonly seen in both the papular and pustular, or the tubercular and pustular forms combined. The lesions are acutely inflammatory, but are not often accompanied by burning, itching, or in fact by any subjective symptoms, excepting occasionally a feeling of soreness when touched. Their color may vary from bright red to dusky or violaceous, with usually a pustular centre. The number of lesions varies greatly in different cases. There may be only one or two, or they may be very numerous. The inflammation may be superficial, or it may be deep, and even occasionally leading to the formation of abscesses. The individual lesions may come and go in a few days, or they may be of slow evolution, but the disease itself is apt in all cases to run a chronic course, the process frequently lasting for years. If there has been much suppuration, more or less unsightly scars may remain.

The chief seat of acne is upon the face, neck, shoulders and chest, although it may occur upon any part of the body except the palms and soles. The severity of the disease varies very greatly. In some instances it may be represented by one or two lesions only, while in others the face, neck, shoulders, chest, and even the whole trunk, may be covered with unsightly papules, pustules, suppurating tubercles and abscesses.

Acne is one of the commonest diseases of the skin. In this country the statistics of the American Dermatological Association show its occurrence in the practice of specialists to be in the proportion of seven per cent. among all diseases of the skin. I am inclined to think this an under-statement of the relative frequency of the disease. Many cases go untreated because patients have been assured by the family physician that the disease is incurable, or that it will get well of itself in time, or that it will not do to drive it in, etc.; refuges of ignorance which may satisfy the conscience of the physician, but which entail at times a great amount of shame

and humiliation on young persons, particularly women, solicitous of their appearance. Acne occurs in the young of both sexes, appearing about the age of puberty. It does not occur in children, and only rarely makes its appearance for the first time in mature years.

Papular acne is chiefly characterized by the occurrence of papular lesions, of pin-head to small pea size, flat, or more or less pointed, lightish in color, situated about the sebaceous follicles, and often showing a minute black point, which indicates the mouth of the sebaceous duct. This variety of acne, sometimes known as *acne punctata*, is often accompanied by comedones. (See *Comedo*.) The lesions, though commonly most plentiful over the forehead, are also frequently met with on the face and elsewhere. There are usually a few pustular lesions scattered among the papules. The latter are not inflammatory, and papular acne is the least developed form of the disease.

Pustular acne is the typical form of the disease, though even when fully developed pustules form the chief feature of the eruption, many lesions of a papular and intermediate character are found. The pustules are pin-head to large pea sized, rounded or acuminate, seated on a more or less infiltrated base of superficial or deep inflammatory product. Suppuration may be slight or abundant. When the base is deeply infiltrated the affection is known as *acne indurata*. This last form sometimes runs into the production of abscesses, which appear chiefly on the face and down the shoulders and back, forming the most serious and annoying phase of the disease. Indurated acne is apt to result in the formation of cicatrices, of a pitted or atrophic character, which are quite disfiguring. Sometimes keloid occurs as a result of indurated acne, the lumpy scars lasting some months, but finally disappearing spontaneously.

Artificial acne is sometimes observed as the result of the

external employment of tar and other substances. The so-called *bromine* and *iodine acne* will be described under another head. (See *Dermatitis*.)

The causes giving rise to acne are numerous and varied in their nature. I know of scarcely any other disease of the skin in which the satisfactory result of treatment depends so much upon the recognition of the exciting cause. In its commoner forms it appears to be dependent to some extent upon the character of the skin. Persons with thick, oily skins are most apt to suffer from the diffuse form of acne, with numerous papular and pustular lesions mingled with comedones, while the sparse eruption of flat and papular lesions is often found in pale anæmic individuals with dry, rather harsh skins. The most frequent cause of acne is puberty. The affection shows itself for the first time, in the vast majority of cases, at this period, and is apt to continue, unless remedial measures are adopted, until the system has assumed the equilibrium of adult life, or in women until a later period. It is at the period of puberty that the sebaceous system takes on a new activity, the hairs begin to develop, and there is a sort of normal hyperæmia about the follicles, which may easily determine an abnormal condition resulting in the development of sebaceous disorders.

Other causes which may, either alone or combined, give occasion to the occurrence of acne, are scrofula and cachexia or general debility. Anæmia and chlorosis may also be mentioned in close connection with these other causes, as favoring the development of acne.

Of great importance in the causation of acne, and especially in favoring its continuance, is habitual derangement of the alimentary canal. Dyspepsia and constipation will be found present in the majority of cases, and often in such intimate relation to the disease that a fresh crop of lesions shall follow every attack of indigestion or of costiveness.

Uterine disorders, especially of a functional character, are often the direct cause of acne; but at other times the cause of the affection seems beyond finding out, the patient remaining in an apparently perfect condition of general health.

The diagnosis of well-developed acne presents no difficulties. We often meet with cases, however, where only a few imperfectly developed lesions are present, and where the affection may easily be mistaken for others of a widely different character. The age of the patient, the seat of the lesions, their chronic character and their inflammatory nature must be taken into account. The acneform eruption caused by tar may be recognized usually by the smell of that substance, and its presence in the follicles giving the appearance of numerous black points. In the eruption caused by bromine and iodine (see *Dermatitis*) the lesions are apt to be larger, of a brighter and more acutely inflammatory nature, and, when well-developed, the lesions tend to coalesce and to form elevated inflammatory areas covered with characteristic sebaceous crusts. Acne often closely resembles the papular and pustular syphilo-dermata, and great care must often be taken to avoid mistakes in diagnosis. The history, the absence of syphilitic lesions on other parts of the body than those commonly affected by the eruption of acne, the uniform distribution of the lesions, those of syphilis tending to group, all serve to denote the presence of acne. When syphilis occurs on the forehead, or in one or two lesions on the nose alone, as I have sometimes seen it, without any history whatever, it is extremely apt to be taken for acne, and great caution must be exercised in coming to a decision as to the nature of the affection in a case seen for the first time. Severe cases of acne are sometimes taken for variola, but this can hardly occur if a careful examination is made into the general symptoms and history of the eruption.

The treatment of acne is of two sorts, constitutional and

local. In order to treat a case of acne with any hope of success, we must first ascertain the causes which have operated in bringing it about. The foundation of the successful treatment of acne lies in the knowledge of its etiology. The patient should be carefully examined regarding every organ and every function. The habits of life, the surroundings, the occupation of the patient, should all be known to the physician, who should also study the case well, to discover, if possible, what is the exact cause or group of causes of which the acne eruption is the expression and the result. Without this little can be hoped for, and acne is one of the minor opprobria of medicine, chiefly because the physician cannot or will not take the trouble to enter into the patient's case with the persevering thoroughness which is indispensable. It should be the aim of the physician to prevent the appearance of the lesions. External treatment will rarely accomplish this, and internal measures must therefore be employed in almost every case. From what has been said under the head of etiology it will be perceived that in general the patient's health must be looked after. If anæmic, tonics are required, among which iron and arsenic are prominent; if the uterine functions are not regularly performed, these must be regulated; if dyspepsia exists this must be combated by diet, regimen and the remedies appropriate to the condition. Constipation is a frequent concomitant with acne, and its removal is necessary to a cure. Acidity of the stomach, flatulence, a coated tongue, are ordinary symptoms, and these, together with irregular and perverted appetite, are constantly met with in the affection under consideration. If constipation exist, saline or vegetable laxatives should be prescribed in sufficient quantity to open the bowels once or twice in the day. An occasional mercurial, as blue pill or a compound cathartic pill, may be prescribed in some cases. The admirable mixture devised by the late Mr.

Startin, of London, known as “mistura ferri acida,” is one of the most valuable aperient tonics which can be given for acne accompanied by constipation. It is composed as follows:—

R. Magnesii Sulphatis.....	℥j
Ferri Sulphatis.....	gr. iv
Sodii Chloridi.....	℥ss
Acidi Sulphurici dil.....	f℥ij
Infus Quassiae.....ad.....	f℥iv. M.

SIG.—A tablespoonful in a tumbler of water, before breakfast.

This preparation, though extremely disagreeable on first taking, becomes less revolting after using for a short time, and most persons, even delicate women, can take it without repulsion. The various ingredients may be altered in quantity in various cases, to suit circumstances, but it is not often necessary to make any change excepting as to the sulphate of magnesium, which must often be increased in quantity if a full aperient effect is desired, or the dose of the formula as given may be repeated before dinner, or even administered thrice daily. The natural mineral waters are used with good success in acne. The Hathorn and Geyser springs of Saratoga, the German Friedrichshall, Hunjadi Janos and Ofener Racoczy, all cathartic, are of use, the dose, of course, varying with the amount of constipation present.

When there is much irritability and hyperæmia accompanying the acne, good results are often gained by the administration of alkalies over a period of two or three months. The acetate of potassium alone, in the dose of half a drachm or mixed with Rochelle salts, is recommended by Dr. Taylor in the following formula:—

R. Potassii Acetatis.....	℥j
Sodii et Potassii Tart.....	℥ij
Syr. Zingiberis.....	f℥ij
Aquæ q. s.....ad.....	f℥viij. M.

SIG.—A tablespoonful in a wineglassful of water, after meals.

There are many cases of acne, however, which depend

upon some general derangement of the system, the scrofulous taint, anæmia, etc., and these must be treated quite differently. Cod-liver oil will in many such cases be found a very efficient curative agent, particularly when the lesions are indurated and tend to extensive multiplication over the trunk as well as the face, with the formation of numerous abscesses. The compound syrup of the hypophosphites is likewise of benefit in these cases, as is also the extract of malt, which may be employed in some instances to replace cod-liver oil, when this is found to disagree. The bitter and ferruginous tonics are occasionally called for in this class of cases, and the mineral acids are often of value.

The following combination of iron with a mineral acid has sometimes proved of value in my hands when dyspeptic symptoms with anæmia coexist with the eruption of acne:—

R. Tinct. Ferri Chlor.

Acid Phosphoric dil....āā... f ℥j

Syrupi Limonis..... f ℥ij. M.

SIG.—Teaspoonful in a wineglass of water thrice daily, after meals.

Among alteratives arsenic stands first, sometimes appearing to act almost as a specific in anæmic cases. It may be given conveniently in the form of Fowler's solution, in two to four minim doses, gradually increased until the limit of tolerance is reached and then dropped a little below this and continued for a considerable period. The following formula is a favorite with me, it combines the arsenic with iron:—

R. Liq. Potassii Arsenitis..... f ℥ij

Vini Ferri.....ad..... f ℥iv. M.

SIG.—Teaspoonful in water, after meals.

Fowler's solution should never be prescribed alone, to be given in drops. This is an inconvenient and not altogether safe method of administration. Patients cannot be trusted to drop out the medicine with the requisite care; the size of the drop may vary with different bottles; and it is always dangerous to allow a bottle of concentrated and poisonous

medicine to go into the hands of unskilled and perhaps careless people. If it is desired to omit the iron, the arsenic may be given in cinnamon water or in plain water as I often prescribe it. It should not be mixed with syrup of orange, etc., as is sometimes recommended; patients are apt to revolt against the cloying sweetness, and it not unfrequently disagrees. I may say here that iron does not agree with some acne patients. As Dr. Fothergill says, iron does not agree with "bilious" people. Instead of arsenic, mercury may be given. Dr. Taylor prefers the following formula:—

℞. Hydrarg. Bichloridi..... gr. j
 Ammoniã Muriat..... gr. vj
 Tinct. Cinchonæ Comp..... fʒ iij
 Aquæ..... fʒ j. M.

STG.—Teaspoonful in a wineglass of water three times a day, an hour after meals.

The dose here is the thirty-second of a grain, which may be increased every ten days until in general one-quarter of a grain is reached. The effect of this treatment begins in about two or three weeks. Of course, it is not to be understood that syphilis is suspected in the cases in which mercury is recommended. It is simply as a tonic alterative. In cases when it may be desired to combine mercury and arsenic, Dr. Taylor recommends "De Valangin's solution," liquor arsenici chloridi, which can be given in connection with the bichloride of mercury. The dose of this solution is the same as that of Fowler's solution. The sulphur mineral waters, as those of Richfield, Sharon, Avon, and the White Sulphur of Virginia, have a reputation for beneficial influence in acne; but I am inclined to believe that there is nothing specific in the effects of the waters themselves; and whatever good may be effected is gained by the pure air and general tonic effect of the surroundings. The influence of sulphur waters is generally upon the liver and intestines, and thus, indeed, they

may be of indirect benefit in acne. Hygiene, in the form of fresh air, exercise, cold bathing, and a sojourn in the country or by the seashore, will now and then effect what medicines may fail to do. It should be added that the seashore life occasionally is found to disagree violently with acne patients, bringing out the eruption in great abundance. Inquiry should be made before sending patients to the seashore, and they should be directed to change at once if the climate should prove unsuitable.

The local treatment of acne is important, and especially so with regard to the choice of remedies. There is perhaps no skin disease in which so many local applications have, at one time or another, been recommended. Used with discretion a few will suffice, but the great number of formulæ extant serve only to confuse the practitioner in search of an appropriate topical application. For this reason I shall give only a selection of those ordinarily used, and this shall embrace the preparations which I am accustomed to employ daily in my own practice, and which I can therefore vouch for from extensive personal knowledge of their good effect.

The external treatment of acne may be either soothing or stimulating. In a small number of cases there is much heat, redness and acute inflammation present, and here mild washes and bland ointments, such as those to be given under the treatment of eczema of the face, will best answer. In most cases, however, stimulant applications are called for. When the skin is rather coarse and sluggish the face may be rubbed and washed every night with the soap known as "sapo viridis," an imported soft soap, the use of which was introduced into this country from Germany. It is of the consistency of ointment, and contains a slight excess of caustic potash. The solution of this soap in one-half its weight of alcohol, known as "spiritus saponis kalinus," may be used instead of the soap itself, when a milder effect is desired. A small

portion of soap or a few drops to half a teaspoonful of the spiritus saponis should be rubbed briskly over the affected skin for several minutes. It must be remembered that these are strongly stimulant preparations, and their chief use is to cause absorption when the lesions are sluggish and indurated. They should be washed carefully off after use, and the part covered with powdered starch or a small quantity of cold cream or some other bland ointment. If they make the skin harsh, their use should be suspended or stopped. When the sebaceous gland ducts are unhealthy and plugged up, and when comedones abound, the soapy applications, especially if combined with copious bathing with hot water, loosen and aid in pressing out the plug of inspissated sebum, and in returning the glands to a more healthy condition. The watch key may also aid here, in pressing out the comedones present. (See under *Comedo*.) A still stronger application sometimes employed in these cases is a fifteen grain solution of caustic potash in water. This may be followed by a stimulant ointment, as the following:—R. Ung. precip. alb., ℥j, ung. aquæ rosæ, ℥iij. The oxide or nitrate of mercury ointments may be substituted if a stronger effect is desired. Sulphur and its preparations are among the most valuable remedies in our possession for the treatment of acne in most of its forms. The following may be given as among the most eligible sulphur compounds with which I have had experience:—

R. Sulphuris Præcipitat..... ℥j
 Ung. Aquæ Rosæ,
 Ung. Petrolii.....āā..... ℥iv. M.

Camphor may sometimes be added, with advantage:—

R. Sulphuris Præcipitat..... ℥j
 Pulv. Camphoræ..... gr. xx
 Ung. Aquæ Rosæ,
 Ung. Petrolii.....āā..... ℥iv. M.

Among lotions containing sulphur the following may be mentioned as being particularly useful:—

R. Sulphuris Præcipitat.....	℥j	
Pulv. Camphoræ.....	gr. v	
Pulv. Tragacanthæ.....	gr. x	
Aquæ Calcis,		
Aquæ Rosæ.....āā.....	f℥j.	M.

This exercises a markedly astringent effect upon the skin, and may be used in cases where there is a tendency to rosacea.

The solution known as that of “Vlemingckxs’” comes into play in sluggish and non-inflammatory forms of acne. It is almost caustic, and must be diluted with from two to four times its volume of water at first, until its effect upon the skin of the individual has been ascertained; it is made as follows:—

R. Calcis Vivæ.....	℥ss	
Sulphuris Sublimat.....	℥j	
Aquæ.....	f℥x.	M.
Boil down to six ounces and filter.		

A mixture of sulphur, ether and alcohol works well in a certain number of cases:—

R. Sulphuris Loti.....	℥j	
Ætheris.....	f℥vj	
Alcoholis.....	f℥iiiss.	M.
SIG.—Shake well before using.		

Among the compounds of sulphur the following are frequently beneficial in the papular and pustular forms of acne:—

R. Potas. Sulphureti.....	℥j	
Tinct. Benzoini.....	f℥j	
Glycerinæ.....	f℥iss	
Aquæ Rosæ.....	f℥iv.	M.

Another prescription which is a favorite of mine is the following :—

R. Potassii Sulphuret,
Zinci Sulphat.....āā..... ℥j
Aquæ Rosæ..... f℥iv. M.

The ingredients are each dissolved in one-half the water, forming clear solutions. They are then mixed, and a white precipitate takes place, which is to be shaken up and allowed to dry on the face.

The following mercurial preparation is of use in papular acne :—

R. Ung. Hydrarg..... ℥j
Ung. Petrolii..... ℥ij. M.

In a certain number of cases bichloride of mercury seems to act better than other preparations. A convenient formula is the following :—

R. Hydrarg. Bichlor. Corros..... gr. ss
Emuls. Amygdalæ Amar..... f℥iv
Tinct. Benzoini..... f℥ss. M.

SIG.—Apply at night.

The corrosive chloride of mercury constitutes the basis of the majority of the lotions for the toilet and cosmetics sold in the market.

Mercurial and sulphur preparations should not be used simultaneously.

Two preparations highly recommended by competent dermatologists, are these :—

R. Chrysarobini..... ℥ss
Collodii..... f℥j. M.

Put a brush in the cork and paint on the lesions every evening.

(GEO. H. FOX.)

R. Zinci Iodidi..... gr. v-xxv
Ung. Petrolii..... ℥j. M.

(R. W. TAYLOR.)

Indurated and pustular acne may sometimes be benefited by the application to each lesion of solution of the acid nitrate of mercury, on the end of a sharpened match, followed by bathing with hot water. Puncture with the point of a fine bistoury or with a lance especially designed for this purpose, is a good procedure in indurated acne with a tendency to the formation of abscesses.

Other and severer remedies for acne have been recommended by authors, but I have had little experience with them, and believe that, in this country at least, the severer measures will usually prove too much for the skin, and will be more apt to prove injurious than beneficial.

Whatever plan of treatment is adopted, it is of the utmost importance that it be thoroughly carried out. The physician should, at first especially, see the patient every day or every few days, to ascertain if his directions are being properly followed. As Taylor remarks, much of the discredit which is attributed to physicians in the treatment of acne is due to two causes: first, either that they are not sufficiently careful, precise and emphatic in giving the directions for treatment; or secondly, that the patients only carry out their directions in an imperfect and indifferent manner. Always give the patient to understand that unless he does what the physician directs him to do, to the letter, the latter is not in any way responsible for his cure.

The prognosis of acne should always be guarded. While by no means the desperate and incurable malady which it is sometimes said to be, by pessimistic or incapable practitioners, it yet often offers a stubborn resistance to treatment, and shows a marked tendency to relapse. The most extensively developed cases, moreover, are sometimes more amenable to treatment than those where half a dozen lesions alone represent the disease, and where the patient enjoys apparently good health. The question is, in the long run, one of time

only, as a spontaneous cure sooner or later invariably occurs. If neglected, however, unsightly and disfiguring scars supervene in severe cases, and our efforts, therefore, should be unremitting to obtain a speedy cure if possible.

Now and then keloid follows as a result of pustular acne. This condition, though unsightly and disfiguring, disappears spontaneously with the lapse of time, perhaps in three to twelve months. Treatment fails to hasten its disappearance.

Acne Rosacea (iii). Acne rosacea is a chronic, hyperæmic or inflammatory disease of the face, more particularly the nose, characterized by redness, dilatation and enlargement of the blood vessels, hypertrophy and more or less acne. Hyperæmia, or flushing, is the earliest symptom, intermittent at first and noticeable only after exposure to a close atmosphere or following the use of alcoholic stimulants or a full meal. This hyperæmia is passive, at first; the nose is cold to the touch and often shows slight seborrhœa. Gradually the redness grows more marked and permanent. If now the nose is examined, small, tortuous blood vessels can be seen ramifying in the skin of the affected part. Sooner or later acne papules and pustules are apt to show themselves, as a rule, however, few in number. The disease varies in intensity in different cases, from a slight blush to a marked deformity. The face and nose are the parts usually attacked. The course of the disease is chronic, sometimes extending over years. The process usually goes no further than the formation of swollen and tortuous blood vessels with diffuse redness, but sometimes hypertrophy of the connective tissue takes place, with grotesque enlargement and deformity of the nose, which becomes knobby, irregular in shape, and may grow to enormous size.

The causes of acne rosacea are various. It occurs both in men and women, but in the latter does not often tend to go

beyond the first stages. In women also the disease is more prone to occur at two periods of life, at early womanhood and at the climacteric period. When occurring in young women, seborrhœa is apt to be present, and the disease appears to be due, in some measure certainly, to dyspepsia, anæmia, chlorosis and menstrual difficulties. It usually goes away but may return in later life. When it occurs in later life it is apt to be more severe. In men the disease may occur at any period. In early life it is generally due to anæmia and debility, nervous prostration and dyspepsia. In later life the use of spirituous liquors is often the cause, and perhaps nearly as often, dyspepsia in some of its forms. Habitual indulgence in alcoholic or malt liquors gives rise to this condition in various regions of the face.

The treatment of *acne rosacea* depends upon the stage of the disease and upon its cause in the given case. Constitutional and local remedies are both used. The causes giving rise to the affection should be diligently sought for and removed, when possible. Uterine and menstrual derangements are to be looked after, the stomach and bowels kept in good order, and all hygienic measures used to improve the general health. Alcoholic and malt liquors are to be totally eschewed. Tea and coffee should be drunk in moderation and not strong. Inveterate tea drinkers are very apt to have red noses. Tea is often made to take the place of food, and gradually brings on a sort of dyspepsia peculiar to itself. The food should be of the plainest character. The general medical treatment is that of *acne*. Local treatment, however, is of the most value. Sulphur lotions, as in *acne*, may be used in the early stages, the following formula being a useful one:—

R. Sulphuris Præcipitat..... ʒj-ij
 Ung. Aquæ Rosæ..... ʒj. M.

Sometimes sulphur lotions are more useful. The following

will be found an efficient combination. It appears to exercise a decidedly astringent effect:—

℞. Sulphuris Præcipitat..... ʒj
 Pulv. Camphoræ..... gr. v
 Pulv. Tragacanthæ..... gr. x
 Aquæ Calcis,
 Aquæ Rosæ..... āā..... f ʒj. M.

This may be applied once to several times a day. In one of the most rapid cures of rosacea I ever observed, the patient kept putting on successive layers of the wash every few hours until her face was covered with a thin yellow crust. Sometimes the wash seems to draw the skin and gives rise to an uncomfortable sensation. In this case the sulphur ointment mentioned just above may be applied in small quantity after each application of the wash. On the whole, I have gotten more benefit for patients out of this wash than any other, and I count it the best application in acne rosacea. It will not always do good however, and we are sometimes driven to try other plans of treatment. A wash of corrosive sublimate, of the strength of one-fourth grain to two grains to the ounce of alcohol, or in ointment, sometimes answers well in the first stage of the disease. Neumann and Hebra recommended mercurial plaster spread on cloths. Geo. H. Fox suggests the employment of chrysarobin:—

℞. Pulv. Chrysarobin..... ʒ^{ss}
 Collodii..... f ʒj. M.
 To be painted on the skin.

Of course, this is to be watched, lest the irritative effect of chrysarobin be produced. In the second stage, when numerous well-defined blood vessels can be seen coursing under the skin, the treatment must be somewhat different. The dilated capillaries may be incised with a sharp knife, in the hope that adhesive inflammation may result, with the effect of closing the calibre of the vessels. Cold water com-

presses are to be applied subsequently, to control the bleeding, and a small number of vessels may be thus operated upon every day or two, until the ground has been thoroughly gone over. Another treatment is painting the affected parts once or twice weekly with a ten- to twenty-grain solution of caustic potassa and following this by an emollient poultice. In cases where there is but little thickening, carbolic acid dissolved in three to four parts of alcohol may be painted on the part every second day. Hardaway recommends electrolysis, using a number thirteen cambric needle inserted into any convenient handle, and connected with the negative pole of a galvanic battery. A sponge electrode is then connected with the positive pole. The needle is inserted sufficiently deep to enter the dilated vessel; so soon as this has been accomplished, the patient completes the circuit by taking the sponge electrode in his hand. So soon as the electrolytic action has been properly developed, the patient releases the sponge electrode, after which the operator withdraws the needle. Six to eight elements will generally suffice. If the vessel to be operated upon is a long one several punctures must be made at suitable intervals of space. The needle may be inserted perpendicularly or in a line with the course of the vessel. In those rare and severe cases where knobby and gross deformity of the nose exists, decortication with the knife is the only remedy.

The prognosis in the early stages is favorable and there are few affections of the face in which more striking and rapid results can be attained, up to a certain point, than in those cases of acne rosacea where there is a "red face" with numerous papular and pustular lesions, with little or no capillary dilatation. When, however, the disease has become thoroughly established, only thorough and long continued treatment will avail. Where the capillary enlargement is already marked, treatment beyond a certain point is only

palliative ; it may prevent further progress, but this is much, and patients should be encouraged to persevere.

Addison's Keloid. (See *Morphæa*.)

Ainhum (vi) is a disease peculiar to the African race, characterized by a slow, progressive, fatty degeneration, generally with increase in volume of the toes, especially of the smallest, resulting from a linear strangulation. The constriction, after four to ten years, forms a deep, circular furrow, and eventuates in snapping off of the toe. Brazil and the West Coast of Africa are the commonest localities of the disease, but within the last few years cases have been reported from the southern United States. Recent pathological investigations, particularly those of Wile, point to the intentional and persistent application of a ligature by the patient as the cause. The only treatment, after strangulation has been effected, is the early removal of the useless and cumbersome member.

Albinism (v). The condition which has been termed albinism consists in a congenital absence of the normal pigment. It may be partial or general. In the latter case the subjects are known as albinos. Here the skin is of a milky-white or pinkish color, the hair white, yellowish-white or red, and even the iris and choroid of the eye are more or less deprived of pigment. When occurring in the negro race those affected are called "piebald." In the latter the eyes are not affected, and cases are on record where the color of the affected patches has returned. This affection is to be carefully distinguished from *vitiligo*, q. v.

Alopecia (v). Alopecia is a condition of more or less complete baldness, resulting from a deficient growth of the hair. It may be considered under the heads of *congenital*, *senile*, *idiopathic premature* and *symptomatic premature*.

Congenital alopecia is the name given to those rare forms of the disease where an individual is born without hair. In one such case microscopic examination showed absence of hair

bulbs. I am familiar with the case of an otherwise healthy infant, upon whose scalp only lanugo (fine downy hairs) grew until after the third year of life. A hereditary predisposition to scanty growth, or early loss of hair, may often be traced.

Senile alopecia, or the baldness of old age, is connected with the general atrophy of the cutaneous tissues, which occurs at this period of life. The hairs become gray, thin and dry, and are cast off not to be renewed. The hairs of the body generally become thinner, and drop out to a less extent, at the same time.

Idiopathic premature alopecia, or premature baldness, may take place either rapidly, in the course of weeks or months, or, as is most generally the case, slowly through a period of years. The hair may begin to come out at any period after puberty, although it does not generally fall much before the age of twenty-five to thirty. The scalp is healthy, to all appearance, no pityriasis being present. At first only a few hairs fall, and these are succeeded by new ones growing from the same follicles, but coming earlier to maturity and falling out before they have attained a normal length. The process is progressive, more and more hairs falling prematurely. Each new crop of hairs is shorter and finer than the preceding, until, finally, only lanugo or short, fine, soft, wooly hairs are produced. In the course of time even these are no longer produced; the hair follicles become atrophied, and complete baldness ensues. The process is sometimes arrested and normal hairs may be produced for a time, but the improvement is apt to be transitory.

This form of alopecia is very common; it is more frequent among men than among women; as in senile alopecia, it ordinarily begins about the vertex and extends towards the forehead.

Symptomatic premature alopecia includes three forms of more or less complete baldness, caused by local or general diseases.

The loss of hair may be temporary or permanent. Fevers, nervous disorders, violent shocks to the nervous system and mental distress, worry or overwork, may give rise to sudden or gradual loss of hair. Local affections, particularly those attacking the follicles, as seborrhœa sicca, pityriasis and lupus erythematosus, may give rise to baldness, generalized or in patches, which may be permanent. When baldness results from erysipelas, psoriasis, eczema or variola, the hair is apt to return again after the disease has passed away and with the recovery of the general health. Syphilis and leprosy also occasion alopecia. In syphilis loss of hair occurs in the first general outbreak, just as in other fevers; the hair is then usually reproduced. Later in the history of the disease it may occur in consequence of local lesions, and when these are ulcerative the hair does not grow again. Such cases are rare, and the notion that has prevailed in some quarters, that premature baldness is the result of syphilis, is absurd, except in the limited sense that debauchery may reduce the tone of the general system, and thus give occasion to falling of the hair.

The remedies to be used in alopecia must depend upon the exciting cause and the circumstances of the disease. The first two forms described are, of course, not amenable to treatment. Idiopathic premature baldness, when there is a hereditary tendency to an early fall of the hair, is almost hopeless as regards any effect to be produced by medication. When there is no history of early baldness in the family, the disease, when taken in hand early, can often be arrested in its progress. Local stimulation is the plan of treatment to be followed. Weekly, semi-weekly, or even daily shampooing may be practiced with the soapy wash known as “spiritus saponis kalinus”:—

R. Saponis Viridis..... ʒiv
 Alcoholis..... fʒij. M.
 Dissolve with heat and filter.

This tends to keep the scalp free from the natural accumulation of sebum and epidermic scales, and likewise stimulates the scalp. After shampooing, the scalp is to be thoroughly cleansed with clear water, dried as thoroughly as possible, and the following oil is to be applied :—

℞. Acidi. Carbolic..... gr. xv
 Glycerinæ..... fʒij
 Aquæ Cologniensis.....ad... fʒj. M.

A good method of applying this oil, so as to get the full benefit of it upon the scalp, is to divide the hair in long parts, by means of a comb, and then, with the aid of a Barnes' dropper, such as is used for dropping solutions into the eye, let a drop or so of the oil be placed here and there upon the scalp, in the line of the part, at intervals of an inch, and well rubbed in with a soft brush like a tooth-brush. Having gone over the scalp in one line thus, let new parts be made, parallel with the first, and the same procedure gone through with. Thus each portion of the scalp is in turn reached by the oil, which is thoroughly rubbed into it, a comparatively small portion getting into the hair to make a mess, as such applications certainly will do if rubbed in at random.

After a time the shampooing with the soap spirit may be dispensed with, or only employed at long intervals, as, in the case of women, especially, this is a very troublesome business.

The inunction with the oil should, however, be persevered in until the hair has ceased to fall, or until the case must be given up as hopeless. The majority of cases, however, will do well under this treatment, if carefully carried out. I think that local treatment alone can be relied upon in this form of alopecia, but, of course, each case must be judged by its total aspect, and the patient's general health cannot be left out of account.

The treatment of that form of alopecia which is, in the stricter sense, symptomatic, such, for instance, as is found in

nursing women, in students preparing for examination, and after exhausting illness or mental troubles, is in general the same as that above given, only that here the patient's general condition is more obviously at the bottom of the alopecia, and attention must first be given to obviating or neutralizing the cause. Iron, quinine, arsenic, occasionally cod-liver oil, and, above all, nux vomica and strychnia, are the remedies on which we chiefly depend. In addition, moreover, to the local remedies above given, cold-water douches, frictions, frequent brushing and the application of one of the stimulating washes to be mentioned under alopecia areata, will be found useful.

The prognosis in premature idiopathic baldness must always be guarded. If we can stop the fall of the hair and prevent matters getting any worse, that is about all that can be expected. To restore what has been already lost is usually more than we can succeed in accomplishing. In baldness following fevers, etc., on the other hand, much can be hoped for as the result of early and vigorous treatment faithfully carried out. Syphilitic alopecia, of course, demands specific treatment, local means not being neglected. The following ointment is useful when distinct syphilitic lesions exist in the scalp:—

R.	Hydrarg. Bichlor.....	gr. ss
	Tinct. Cantharidis.....	f ʒj
	Medullæ Bovis.....	ʒ ss
	Ol. Rosæ.....	q. s. M.

Alopecia Areata (v). Alopecia areata is an atrophic disease of the hair system, characterized by the unusually sudden appearance of one or more circumscribed, whitish bald patches, varying in size and shape, or of more or less universal baldness. Alopecia areata may attack any portion of the hairy surface, but the scalp is by far the commonest seat of the disease. In rare instances the entire hair system is involved, and the patient may not only lose the hair from

the scalp, but that of the eyebrows and lashes, the beard, the axilla and pubis, and the fine hairs over the general surface of the skin. A number of such cases have come under my observation, among others those of a mother and daughter, respectively thirty and fifty years of age, both of whom showed complete absence of hair from the scalp, pubis and axillæ, of some years' standing. Upon the scalp the disease is usually observed to consist of one or several patches of baldness, roundish, sharply circumscribed and conspicuous. They may vary in size from a small coin to the palm of the hand. The baldness is generally complete, the area presenting a whitish, perfectly smooth, polished surface, often without a trace of hair. Less frequently a thin growth of hair persists over the nearly bald areas. The skin is slightly or not at all altered, excepting that the hair follicles gradually atrophy.

The course of the disease is variable; in some instances the hair thins out slowly; in other cases a handful of hair may come out in a single night, leaving a fully developed patch. The ultimate size of the area is soon reached, and it usually grows no larger. When several patches exist they usually form one after another, and one may be recovering while another is forming. The disease may continue weeks, or oftener months; its course is very variable. Relapses are not uncommon. A growth of lanugo, or fine, downy hairs, often occurs in the course of the disease, leading to the false hope that the hair is at length about to return; but the soft, fine hairs drop out again, leaving the patch as bald as before. When, however, complete repair once sets in, recovery is usually rapid. The new hair is sometimes pale, gray or mixed in color. There are no subjective symptoms, as a general thing, but patients now and then suffer from neuralgia, or notice a premonitory itching or soreness.

The causes which produce the disease are not understood. It is non-parasitic in its nature and is not contagious; at

least that has hitherto been the general belief. The opinion is gaining ground, however, that a certain number of cases are due to a very minute vegetable parasite. Enough is not as yet known to pronounce with certainty upon this point, but I think that we are justified in warning patients, particularly children, against exchanging caps and otherwise coming into close contact with those suffering from this affection. The majority of cases of alopecia are, in all likelihood, due to some functional nerve disturbance, causing impaired nutrition. It has been noted to follow neuralgias, sudden nervous shocks, and debility resulting from various causes. In many cases, however, patients enjoy excellent health, and no appreciable cause for the attack can be assigned.

Alopecia is more apt to be mistaken for *tinea tonsurans* than for anything else.* The suddenness of the attack, however, the more or less complete baldness, the absence of desquamation, the whiteness and remarkable smoothness of the patch, always enable it to be distinguished from *tinea tonsurans*. Difficulty can only arise in old cases of *tinea*, where the short, characteristic hairs have disappeared; but even here more or less desquamation exists, with a grayish "goose-flesh"-like surface, very different from the ivory-like appearance of the scalp in alopecia areata. *Tinea tonsurans* begins as a small patch and spreads slowly; there are always, or almost invariably, a certain number of nibbled-looking, broken-off hairs in the patch, and there is a history of contagion. The microscope revealing the characteristic fungus (see under *Tinea tonsurans*) will settle the matter, and should always be employed in cases of doubt.

* There is a form of syphilitic alopecia where the hair falls entirely from a segment of the eyebrow. This, which is pathognomonic of syphilis, is sometimes the only sign of that disease present, and may be confounded with alopecia areata. The occurrence in this locality alone is, however, suspicious of syphilis.

The treatment of alopecia areata should be both internal and external. The ordinary tonics—iron, quinine, arsenic and nux vomica, or strychnia—are ordinarily to be employed. In some cases, phosphorus and cod-liver oil may be given with advantage. There are few skin affections where the skill of the practitioner in general treatment is more demanded. Often the patient's general health appears to be perfect, and only after long and careful search can the weak point be found to which the failure in nutritive power is to be attributed. Occasionally the minutest examination will fail to yield any evidence of disturbance of the normal equilibrium of the system. Treatment must then be purely empirical. Hygiene is always of importance.

The external applications which have been found useful, or which have been thought to be of use, in alopecia areata, are all directed with a view to one single object, namely to stimulate the skin and to cause a more active flow of blood to the affected parts. Alcohol, cantharides, the essential oils, glycerine, castor oil, carbolic acid, tar, iodine, turpentine, ammonia, salts of mercury, veratria, acetic acid, tannic acid, nux vomica, pepper, quinine, sulphur, kerosene oil and crude petroleum, are among the remedies usually recommended as most valuable. These substances may be applied either in the form of ointments or of lotions, in sufficient strength to produce a stimulant or rubefacient effect, once or twice daily, as occasion may require. Before making any of these applications it will be well to have the scalp or other affected part washed well with castile soap and water or, better, with the spiritus saponis kalinus. (See *Alopecia*.) After washing, the scalp is to be dried with a coarse towel, and brushed with a thick-set but not too stiff brush, until moderately stimulated.

Patients sometimes express the fear that a vigorous application of the external remedy may itself produce baldness to

a greater degree, but it will be found that after the patches have fairly formed the remaining hairs are firmly seated. Among the formulæ published in such numbers in books and medical journals, those following will be found most efficient in the majority of cases:—

R.	Tinct. Cantharidis.	
	Tinct. Capsici.....āā.....	f 3 ss
	Olei Amygdalæ dulcis.....	f 3 ij
	Aquæ Cologniensis.....	f 3 j. M.

Wilson recommends the following, which I have sometimes used with satisfaction:—

R.	Olei Amygdalæ dulcis.....	f 3 j
	Liquoris Ammonia fort.....	f 3 j
	Spiritus Rosmarini.....	f 3 v
	Olei Limonis.....	f 3 j. M.

Wilson also recommends frictions with a liniment of aconite, etc.:—

R.	Tinct. Aconiti rad.....	f 3 iv
	Chloroformi.....	f 3 ij
	Liquor Ammonia.....	f 3 j
	Pulv. Camphoræ.....	3 j
	Olei Olivæ.....	f 3 vij. M.

Oil of turpentine, brushed or rubbed into the patches with a stiff brush, once or twice a day, until the scalp becomes sensitive, is recommended by some writers. The late Tillbury Fox recommended the following, which I have used more frequently and with more satisfaction than other preparations:—

R.	Tinct. Nucis Vomica.....	f 3 ss
	Tinct. Cantharidis.....	f 3 vj
	Glycerina.....	f 3 ij
	Aceti Destillatæ.....	f 3 iss
	Aquæ Rosæ.....	f 3 iij. M.

When from the number of short, broken hairs around the margin of the patches, a parasitic origin of the disease is suspected (ringworm of the scalp being carefully excluded), officinal sulphur ointment sometimes acts very efficiently. Blistering the surface with cantharidal collodion, has sometimes been tried with success. Electricity also is used in some cases with advantage, four to ten cells of the constant current battery being used, and the negative pole placed in contact with the diseased patch. The treatment of alopecia of the beard is essentially the same as that of alopecia of the scalp.

The prognosis of alopecia should be guarded. Sometimes recovery takes place in a few months, in other cases it may be delayed for years. Now and then the hair is not restored at all. As a rule, in young persons the baldness is not permanent. Treatment should be persevered in.

Angioma. (See *Nævus*.)

Anidrosis (i). Anidrosis is a functional disorder of the sweat-glands, consisting in a diminished and insufficient secretion of sweat. It sometimes occurs in connection with ichthyosis. (See *Ichthyosis*.) In rare cases an individual ceases to sweat entirely at times. In these cases the health is greatly impaired, and much suffering may ensue, especially in warm weather. The disease in this form is very rare. In the treatment every effort should be made to increase the activity of the skin. Hot or cold baths, steam baths and frictions may be employed. Pilocarpin would seem to be indicated, but I do not know if this remedy has been employed as yet. Of course, the general health should be looked after.

Aniline Dyes, skin disease produced by. (See *Dermatitis*.)

Anthrax (ii). Anthrax or carbuncle is a hard, more or less circumscribed, dark red, painful, deep-seated inflammation of

the skin and subcutaneous connective tissue, variable as to size, terminating in a slough. Carbuncle is usually accompanied by a good deal of constitutional disturbance. It is ushered in by a chill followed by fever. The skin over the affected part becomes hot and painful, and a firm, flat, more or less sharply circumscribed inflammation, of a somewhat dusky red hue, forms, which is deeply seated in the tissues. It is painful, with commonly more or less of a burning sensation. The symptoms become gradually more marked during ten days to two weeks, when the tissues begin to break down and soften, and the skin becomes gangrenous. Perforations appear at various points, either filled with tough, yellow, fibrous *cores*, or hollow; and from these issues a yellow, sanious fluid. The surface soon assumes a cribriform or sieve-like appearance, which is very characteristic. Unless the carbuncle is small the whole skin covering it usually sloughs sooner or later, leaving a large open ulcer, healing slowly.

The duration of carbuncle is usually from four to six weeks, though its course depends somewhat on the age and strength of the patient. It is usually single, and its favorite seats are on the back of the neck, shoulders, back and buttocks. It is a serious disease in elderly persons, and when extensive is apt to terminate fatally. Boils are apt to appear about the borders of carbuncle. The affection sometimes occurs in connection with diabetes.

The causes are, so far as can be conjectured, similar to those which give rise to furuncles. The disease is not a group of boils, but a much more deeply-seated and serious affection.

Carbuncle is distinguished from furuncle by its size, flatness, coarse multiple points of suppuration and extensive slough. From erysipelas, which it sometimes resembles in its early stages, its circumscribed outline will soon distinguish it.

The general treatment of carbuncle should be strongly supporting. The most nourishing foods and stimulants must be freely given. Tincture of iron and quinine are the best medicines. The latter should be given in sixteen to twenty-five grain doses once daily. Anodynes should be given freely when required to procure rest at night. Fresh air and exercise, when these can be taken, are important factors. When the carbuncle is tense and hard, deep, cruciform incisions for relief have the sanction of old usage to recommend them. The majority of cases, however, according to Sir James Paget, do equally well without cutting. Prof. Agnew suggests painting cantharidal collodion around the carbuncle in a broad band, the effect of the blister being to remove the tension. Ashhurst strongly recommends compression by means of adhesive strips, as in swelled testicle, applying them first at the margin and gradually bringing them more and more inward, leaving a space at the centre to allow the slough to come out. Among dressings, Hebra recommends cloths wrung out of cold water, or ice bags, in the early stage. So soon as suppuration begins, warm fomentations, poultices, etc., are to be used. These tend to relieve the tension of the tissues, and hasten the discharge of the slough. The poultices are best made with flaxseed meal or corn meal; they should be put on hot and changed frequently. The parts should be kept clean, washed frequently with a weak carbolic acid solution, and the slough removed as rapidly as possible, so as to leave a minimal amount of diseased tissue in contact with the springing granulations. When the ulcer begins to granulate it must be encouraged to heal. The prognosis should be extremely guarded.

Argyria. (See *Chloasma*.)

Army Itch. (See *Scabies*.)

Arnica. Skin disease from tincture of. (See *Dermatitis*.)

Artificial Eruptions. (See *Feigned Eruptions*.)

Atrophia Cutis. (See *Atrophy of Skin.*)

Atrophy of the Skin (v). There are several forms of cutaneous atrophy, some of which seem to occur idiopathically and without obvious cause, while others are the result of some general disorder or of some injury to the nerves. In the "glossy skin" of writers upon nervous diseases the extremities, especially the fingers, become pinkish or reddish, smooth, shining and glossy, as though varnished. The lesions resemble chilblains in appearance. The affection is accompanied by burning pain, and follows intractable neuralgia, wounds and other lesions of the nerve trunks.

General idiopathic atrophy of the skin is a very rare condition, in which the skin becomes dark and discolored in patches and swollen, then contracts, becomes of an olive color, and seems too small for the body. The sensibility of the skin is deadened and the movements of the body effected with difficulty.

The disease described as "Xeroderma of Hebra" is a form of diffuse idiopathic atrophy of the skin. The skin in this form of the disease becomes thin and lightly stretched, dry as parchment and wrinkled. In places it is white and without pigment, while elsewhere it is abundantly dotted over with disseminated punctiform or lentil-shaped, yellowish or dark brown, pigmented spots, resembling those of freckles, giving the skin a remarkable chequered appearance. Here and there are bright red telangiectases.

Another form of atrophy of the skin is that known as "atrophic lines and spots." This form of atrophy may also be idiopathic or symptomatic. In the first case it comes without apparent cause, the patient's attention often being attracted to the lesions only by accident, and after they have existed for some time. The lines (*striae atrophicæ*) are usually an eighth to one-quarter of an inch in diameter, and one to several inches in length; the spots (*maculae atrophicæ*) are

roundish or ovalish, and from a pin-head to a pea or finger-nail size. Both lesions present a smooth, glistening, scar-like appearance, are perceptibly thinned to the touch, slightly depressed or grooved, and show a peculiar mother-of-pearl lustre. The lines are usually found in numbers running parallel to one another, and in an oblique direction. The spots are generally isolated. They may occur on any part of the body, but are usually found on the buttocks, trochanters, pelvis, and on the thighs, upon both extensor and flexor surfaces. They run a slow course, and give rise to no inconvenience. Their course is obscure; they are sometimes found in connection with morphœa. (See *Morphœa*.)

Symptomatic lines and spots of an atrophic character are those formed by stretching of the connective tissue bundles, as seen on the skin of the abdomen in pregnancy, etc. (See *Hemiatrophia facialis*.)

Atrophy of the Hair (v). Symptomatic atrophy of the hair may be the result of pityriasis and the parasitic diseases of the scalp, and also of syphilis, fevers, etc. The hairs diminish in size, become dry and brittle, and tend to split up and separate. Idiopathic atrophy of the hair, a rare condition, manifests itself in several forms which have been described of late years. We have *Fragilitas crinium*, when the hair is thinner in one part of its shaft than another, while the free ends tend to split into filaments. Duhring has described one form of this affection where the hair splits in its length, separating within the hair follicle and giving rise to irritation. Another form of atrophy of the hair is that known as *Trichorexis nodosa*, which consists in the formation of a series of small, spindle-shaped, bulbous swellings, situated at irregular intervals along the shaft of the hair, and looking like the ova of pediculi. The hair breaks at these bulbous points, leaving a brush-like extremity of ragged filaments. A somewhat similar disease is *Piedra*, which is met with in South America,

in which hard, gritty particles, visible to the eye, are found surrounding or attached to one side of the hair, at short intervals. These forms of disease are, some of them, more frequently found on the scalp, others in the beard. Constant shaving is the treatment which seems to do most good.

Atrophy of the Nail (v). Atrophy of the nail is an affection scarcely worthy of note, were it not for the fact that it may be mistaken for affections of a more important nature, clinically and therapeutically, as the parasitic diseases of the nail. The nail is usually smaller and thinner than normal; or brittle and split; or soft and crumbly—according to the cause. The color may be pale, whitish, opaque or dark. The so-called “worm-eaten” condition of the nail, due to various causes, is generally an atrophy. Injuries, syphilis, eczema, psoriasis and fungous disease may attack the nail, and are to be distinguished from idiopathic atrophy. The remedies appropriate to these diseases elsewhere will generally cure them when they attack the nail, but idiopathic atrophy is almost, if not quite, incurable by any means at present known. I have sometimes thought that arsenic, in the form of four-minim doses of Fowler’s solution, has been useful, and would suggest the further trial of this remedy.

Baldness. (See *Alopecia*.)

Barbadoes Leg. (See *Elephantiasis*.)

Bakers’ Itch. (See *Eczema* of the hands.)

Barbers’ Itch. (See *Tinea sycosis*.)

Bed-bug. This insect is occasionally the cause of an urticaria-like eruption on the skin, which is liable to be mistaken for other diseases. The lesion produced by its bite is of the nature of an urticarial wheal, consisting of a circumscribed, slightly raised, split-pea sized erythematous spot, with a whitish centre, and at times attended with considerable swelling. A reddish blood spot, or hemorrhage, under the skin remains after the wheal has subsided. The sensation is

at first of a very slight prick, followed in a few minutes by burning and itching. In children the disease is often taken for "hives" or "nettlerash" (urticaria). The bites of the bed-bug may be relieved by lotions containing alcohol, carbolic acid, vinegar, dilute acetic acid, corrosive sublimate, lead water, spirits of hartshorn, etc., sponged upon the parts. The best preventive against bugs in beds and other haunts is solution of corrosive sublimate. Pyrethrum powder is also useful.

Bloody Sweat. (See *Purpura*.)

Body Louse. (See *Pediculosis corporis*.)

Boil. (See *Furuncle*.)

Bromidrosis (i). Bromidrosis is a functional disorder of the sweat glands, characterized by more or less sweating and an offensive odor. The affection may be local (it usually occurs on the soles), or general. The odor may be of a general disagreeable character or it may be distinctive, resembling the smell of a goat or of urine. Cases have been reported where an odor resembling that of violets or pineapple has been exhaled during attacks of hysteria, anger or sexual excitement. The treatment is that of hyperidrosis. (See *Hyperidrosis*.) Salicylate of sodium, in five-grain doses, has proved useful in cases depending on nervous excitement.

Bromine Eruption. (See *Dermatitis Medicamentosa*.)

Callositas (iv). Callosities are those hard, thickened, horny patches of skin, of variable size and shape, grayish or yellowish in color, unattended by pain, and which occur for the most part about the hands and feet. They are composed of an increased quantity or growth of the epidermic layer of the skin. They commonly occur at some point where the occupation of the individual gives occasion to unusual pressure and friction, so that in many cases the profession of the patient can be surmised from the locality

of the thickening. Occasionally, however, they appear to occur spontaneously.

When the callosity causes pain or inconvenience, it is to be removed by means of local measures. The part should be soaked repeatedly in warm water, or macerated by a water dressing or a poultice, and when it is softened, it may be scraped or pared off, layer by layer, by means of a sharp knife. A plaster of india rubber containing salicylic acid has also been recommended in severe cases.

Cancer of the Skin. (See *Carcinoma*, *Epithelioma* and *Sarcoma*.)

Canities. Graying or whitening of the hair. It may be senile or premature. Premature graying of the hair may occur under a variety of circumstances, and may be partial or universal. It rarely takes place before adult life. Usually when the hairs have once turned gray they remain so, but sometimes recover their color. Occasionally, the hair is found to turn gray in winter and dark in summer. The hair may turn gray after severe illness, after injuries or diseases of the nerves, or after ligation of the carotid. In one case coming under my care, a woman with red hair lost it almost entirely, from alopecia areata. As the hair began to come back, after some months' treatment, it was at first quite gray, but afterwards recovered its color. In a case of lupus erythematosus of the scalp, under my care for several years, the hair, which was absent entirely while the disease was present, began to return as the patient recovered, but instead of being brown as before, was found to be of a dark gray tint. The question as to whether the hair may turn suddenly gray, in a single night, for instance, has been much discussed. I think a sufficient number of authentic cases have been published to prove that this can certainly occur. Internal remedies have no effect in restoring the color of the hair. Dyeing is the only resort.

Carbuncle. (See *Anthrax*.)

Carcinoma (vi). The commonest form of cancer of the skin is *epithelioma*, and under this head will be found a description of the various forms of this variety of cancer.

The other varieties of primary or secondary cancer of the skin are the following: 1. *Carcinoma lenticulare* ("scirrhous," "hard," "fibrous" or "connective tissue" cancer); characterized by smooth, glistening, dull pinkish or brownish red, flat or raised papules, tubercles or nodules, from pea to bean, or larger size, disseminate, at first separate, later running together, slow in its course, involving the neighboring glands, causing pain, breaking down, recurring on excision and ending fatally. 2. "*Carcinoma tuberosum*;" a rare affection, occurring in flat or raised, rounded or ovalish, tubercular or nodular lesions, from pea to walnut size or larger; firm, hard, deeply imbedded in the skin and the subcutaneous connective tissue, of a dull reddish, brownish red or violaceous color, multiple, disseminated, or irregularly grouped, sooner or later breaking down into ulcers and ending fatally. 3. *Carcinoma melanodes* or *pigmentodes*; beginning in the form of multiple, small, pin-head, pea- or bean-sized, rounded or ovalish, soft or firm papules, tubercles or nodules, of an iron-gray, brownish, bluish black or blackish color, at first discrete, but tending to aggregate into tumor masses, and then to break down and ulcerate, forming often fungous, gangrenous and pultaceous masses, commonly found starting in a mole or wart on the face or on the hands and feet, usually encountered in early adult or middle life, and pursuing a malignant course.

The treatment of these forms of cancer, when early seen, is essentially the same as that described under *epithelioma* and *sarcoma*. Later they necessarily fall under the care of the surgeon.

Chaps. (See *Eczema, fissum* and of hands.)

Cheiro-pompholyx. (See *Dysidrosis*.)

Chilblain. (See *Dermatitis congelationis*.)

Chloasma (iv). Chloasma, sometimes called "melanoderma," is a discoloration of the skin, occurring in variously sized and shaped patches, of a yellowish, brownish or blackish tint. It may occur over a part or over the entire surface, and may be idiopathic, the result of external agencies, as scratching, blistering and heat, or symptomatic. Belonging to the latter category may be mentioned chloasma uterinum, the pigmentation of Addison's disease, and those discolorations which occur in connection with certain general diseases, as tuberculosis, cancer, malaria, etc.

The most important variety of chloasma is chloasma uterinum, which consists in the presence of one or several patches of pigment deposit, appearing usually about the forehead, extending across from side to side, from below the base of the scalp to just above the eyebrows, in a broken or continuous band. Occasionally the whole face may be covered, as with a mask. The discoloration may also occur elsewhere on the body. The affection occurs between puberty and middle age, is more frequent in married women, and is caused by pregnancy or by uterine derangements. In single women it generally occurs between the ages of thirty and forty, and does not show itself after the climacteric period, either in the single or in the married.

Chloasma is apt to be mistaken for *tinea versicolor*, on account of the similarity in color. The distribution of the disease is, however, quite different (see *Tinea versicolor*), and the presence or absence of the fungus always found in the latter disease on microscopic examination will settle the question. The treatment of chloasma should first be directed to the removal of the cause, when this is possible. Without this all external treatment is apt to be disappointing. The discoloration may be removed from the skin temporarily, by

means of certain washes which cause desquamation of the superficial layers of the epidermis. These must be used at first with some caution, to prevent a too severe action upon the skin. The following formulæ may be suggested:—

R.	Hydrarg. Chlor. Corrosiv.....	gr. vss	0	50
	Zinci Sulphatis			
	Plumbi Subacetatis.....āā...	3 ss	2	
	Aquæ	f 3 iv.	M.	
Sig.—	Lotion. Apply morning and evening.			

Here is a formula recommended by Bulkley:—

R. Hydrarg. Chlor. Corrosiv... gr. vj
 Acidi Acetici Diluti..... f 3 ij
 Boracis..... ʒ ij
 Aquæ Rosæ..... f 3 iv. M.

SIG.—Lotion. To be applied night and morning. At first this may be gently brushed over the affected parts, which may afterwards be rubbed well with it. If the skin becomes too scaly this application should be suspended for a day or two, and sweet cream should be applied.

Recently this ointment has been recommended:—

R. Hydrarg. Pur..... gr. c
 Ung. Hydrarg.,
 Sevi. Benzoinati.....āā..... gr. c
 Adipis Benzoinati.....ad..... 3 iv. M.

Spread upon muslin and bind on patches at night, or rub in thoroughly with the finger.

During the day the following paste is to be spread thinly over the affected parts:—

R. Bismuthi Oxychlorati,
 Amyli Oryzæ,
 Kaolini.....āā..... gr. l
 Ung. Glycerinæ (Ph.G.), oth-
 erwise Glycerite of Starch, 3 iv. M.

Argyria is a form of discoloration of the skin occurring after the prolonged use of nitrate of silver. Iodide of po-

tassium, in the average dose, has been employed successfully in two cases of this condition.

Nævus pigmentosus, or pigmentary mole, may be of various size and shape, with a soft and smooth, or an uneven and rough, surface; or it may occur in the form of thick, soft, fatty, connective tissue growths. Sometimes hairs are found growing from it. Pigmentary nævi may be single or multiple. They may occur in the course of nerve tracts, or, more frequently, irregularly scattered over the surface. They may be removed by means of the knife, or with caustics; when they are small and flat they may be operated upon with caustic potash or ethylate of sodium. Sometimes patients desire the hairs to be removed from hairy moles of the face without caring to undergo an operation for the entire growth. In such cases recourse may be had to electrolysis (see *Hirsuties*) with a very satisfactory result. The small scar caused by the removal of the hair tends to lighten up the color of the mole.

Chromidrosis (i) shows itself in the excessive secretion of variously colored sweat, which may be bluish, blackish, reddish, greenish or yellowish. It is apt to be intermittent. It is so rare as to be a curiosity rather than a disease. Astringent applications are indicated. (See *Hyperidrosis*.)

Clavus (iv). Clavus or corn is a small, circumscribed, usually flat, deep-seated, more or less horny formation, painful upon pressure, situated for the most part about the toes. Like the callosity, it is the result of pressure, and this, if continued, may give rise to inflammation. The common seat of the corn is the outer seat of the little toe and the tops of the toes. Occurring between the latter, the corn is accompanied by more or less maceration, and is known as a "soft" corn. The cause of corns is to be found in ill-fitting or too tight shoes. The growth is made up of a circumscribed, excessive development of the epidermis, and of a central

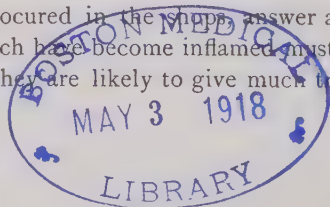
portion or core. The latter extends quite deeply into the tissues, in the form of an inverted cone, the base being directed outwards, and appearing on the surface as a rounded spot. The apex of the corn rests on the papillary layer of the corium. The pain attending corns is produced by the core pressing upon the true skin, causing irritation of the nerve filaments of the papillæ.

The first principle in the treatment of corns is the removal of the cause. Tight or badly-fitting shoes must be changed for others or modified in shape. The next point is the removal of the mass of epidermis. The professional chiropodist prefers to do this while the corn is dry, because its limits are better defined. Most persons, however, will object to the pain this is apt to cause, and I think it better, as a general thing, to first soften the epidermis by means of a poultice, or by covering the corn with a bit of patent lint, soaked in solution of sodium carbonate, and covered with a piece of oil silk or wax paper. The outer layers being thus macerated, may be removed by picking or scraping them with a sharp knife; care being taken not to penetrate and wound the sensitive tissues. The corn should be protected from pressure by a plaster, as the "emplastrum fuscum":—

R. Plumbi Oxidi Rubri..... ʒiv
 Olei Olivarum..... f ʒj
 Ceræ Flavæ..... ʒij
 Pulv. Camphoræ..... gr. x. M.

Boil the lead oxide and the oil together until a brownish-black mass is formed; then add the other ingredients, while still hot.

Or diachylon plasters may be used. They should be spread upon soft leather or chamois, and have a hole cut in the centre. The corn plasters in felt, of ring shape, which may be procured in the shops, answer an excellent purpose. Corns which have become inflamed must be cared for assiduously, or they are likely to give much trouble. Perfect rest,



for a time at least, is required in these cases, and some soothing application. Poultices of bread crumbs and dilute lead water, applied cold, exercise a powerful sedative action. Soft corns are best treated by excision, when this is possible. Nitrate of silver in solid stick, glacial acetic acid, flexible collodion, powdered oxide of zinc or tannic acid, are all useful. The toes should be separated by a thin layer of raw cotton.

Comedo (i). Comedo is a disorder of the sebaceous glands, characterized by yellowish or whitish, pin-head size elevations, containing in their centre blackish points. It is observed chiefly about the face, neck, chest and back. Each single elevation is called a comedo (plural comedones). The common name, "flesh-worms" or "grubs," is calculated to convey the erroneous idea that the small inspissated plug of altered sebum which can be expressed from the follicle is a parasitic worm. It is true that a little mite, the microscopic *Demodex folliculorum*, is occasionally found in the mass, but this cannot be regarded as in any way essentially connected with the disease. Its presence is merely fortuitous and without significance, the plug consisting of altered sebaceous matter, mingled with epithelial cells. The affection, though comparatively trifling, and without subjective symptoms, is often extremely annoying to patients. It is due in part to idiosyncrasy, in part to a general sluggish performance, not only of the functions of the skin, but also of those of the whole body. Patients are apt to suffer from dyspepsia with constipation. In young women chlorosis and menstrual difficulties are apt to be present. The disease is pre-eminently one of the period of puberty; patients seeking relief from this complaint are almost invariably young men and young women, although the disease may occur in infants and young children.

Local treatment suffices in most cases to relieve the con-

dition. Frequent bathing of the affected surface with hot water will aid this process of removal. Stimulating ointments, especially such as contain sulphur, are useful, as the following:—

℞. Sulphur. Præcipitat..... ℥j
 Ung. Aquæ Rosæ..... ℥j. M.
 Sig.—To be rubbed in at night.

Sulphur lotions, such as those given under the head of acne, may also be useful. Should the skin tend to become harsh under the use of these remedies, weak alkaline ointments may be used for a time, as this:—

℞. Sodii Bi-borat ℥ss
 Glycerinæ..... ℥xvj
 Ung. Aq. Rosæ..... ℥j. M.

An excellent application is the following:—

℞. Aceti..... ℥ij
 Glycerinæ..... ℥iij
 Kaolini..... ℥iv. M.

This forms a soft paste, which is to be spread over the surface at night, and, if possible, in the morning also. If applied on the face, the eyes should be kept shut, on account of the pungency of the vinegar. It loosens and dislodges the sebaceous plugs more satisfactorily than any other preparation with which I am acquainted. A watch-key may be employed to press out the comedones, the end being gently but firmly pressed down over the sebaceous plug. Should this not yield readily, the point of a fine needle may be run into the follicle, alongside of the comedo, and then moved around, so as to loosen and detach the plug from its surrounding wall. Care should be taken not to use too much force, for fear of inflaming the skin. If the comedo plug does not come out easily, it should be left for another time. It must be remembered, that so long as the condition which produces comedo is

present and effective, the comedones are apt to be reproduced. Several in succession may have to be removed from the same glandular opening.

Occasionally the contents of the sebaceous follicles become even more condensed and hardened than above described. The firm, almost horn-like plugs are gradually forced out of the mouth of the follicles, until they may stand up stiffly above the surface of the skin. Such a case came under my notice years ago, the skin of the trunk, particularly over the shoulders, being the seat of the disease. The hardened sebaceous plugs, in great numbers, projected to the height of an eighth to a quarter of an inch, giving the surface of the skin a nutmeg-grater appearance, viewed from a little distance. Hot baths, frictions with *saponis viridis* and inunction of officinal sulphur ointment, may be used in such cases.

Condyloma. (See *Verucca*.) The name of "condyloma lata," or "flat condyloma," has sometimes been given to the moist syphilitic papule. This term leads to confusion, and has been mostly dropped by modern writers. There is but one condyloma, which has nothing syphilitic about it, although it may occur on a syphilitic patient, just as he might have an ordinary wart on the finger.

Corns. (See *Clavus*.)

Cornu Cutaneum (iv). Cutaneous horns are hypertrophic growths or excrescences of the skin, which, when fully developed, differ slightly, if at all, in structure, from those found normally in the lower animals. They are solid, hard, dry and wrinkled, or laminated. In form the growth is usually elongated and roundish or conical; sometimes it assumes a flattened or button-like form. The horn is often twisted and misshapen. The color varies through gray to black, or it may be yellowish or brownish. Horns may be of any size from that of a pin's head to that of the finger.

The base is concave or flattened, and rises from the skin, which may be normal or inflamed. Horns are usually single, but may be multiple. They may occur upon any part of the body, but are common upon the face. A case has been reported where a horn of considerable size grew from the foreskin of the penis. Though commonly occurring upon elderly people, they are also found in the young. They are painless when not injured, and grow slowly, dropping off at times when they have reached considerable size, and leaving behind a shallow ulcer from which the horn is again reproduced.

The treatment of cutaneous horn is simple. The growth is to be twisted or cut out, and the base cauterized with caustic potassa or chloride of zinc, to prevent its reproduction.

Crab Louse. (See *Pediculosis*.)

Crusta Lactea. (See *Eczema*.)

Cyst. (See *Sebaceous cyst*.)

Dandriff. (See *Pityriasis capitis*.)

Dermatitis (ii). Under this head are grouped a number of inflammatory diseases of the skin, which the insufficiency of our present classification does not permit to be placed elsewhere. The lesions vary in the different affections classed under dermatitis. In some, erythema of various grades exists; in others, vesicles, pustules, blebs or gangrene may present themselves. According to the causes producing this form of inflammation of the skin, we may have: 1. *Dermatitis traumatica*. 2. *Dermatitis venenata*. 3. *Dermatitis congelationis*. 4. *Dermatitis calorica*. 5. *Dermatitis gangrenosa*. 6. *Dermatitis medicamentosa*.

Dermatitis Traumatica. This is due to violence to the skin. Under this head are included abrasions, contusions, excoriations depending upon scratching, etc.

Dermatitis Venenata. This is produced by poison oak and ivy, poisonous sumac, nettle, mezereon, arnica, etc., and

is one of the most important of these forms of dermatitis, on account of its common occurrence, and the pain and annoyance to which it gives rise. It prevails chiefly in the Spring and Autumn, and varies much in intensity in different parts of the country, occurring in a severe form in California, for instance. Personal idiosyncrasy likewise plays an important part. An exposure to direct contact with the poison vine, or oak, may be endured by one person with impunity, while another, susceptible to the influence of the rhus, may be severely attacked as a result of exposure to the smoke, alone, of the burning vines, or even to the wind blowing over the fresh ones. The poison is readily conveyed from the hands, the usual point of first contagion, to the face and genitalia, which are very apt to become the seat of the disease, also. The eruption usually follows exposure within a few hours. It may be erythematous or vesicular, but is usually the latter. The vesicles may be few in number and ill-developed, or they may be numerous, of various sizes, crowded together and seated on an inflamed or cedematous base. Swelling, heat and itching are among the most marked symptoms. Sometimes the parts attacked, as the face, are much swollen and disfigured. The lesions run an acute course, usually rupturing and drying into yellowish crusts. The affection may last from one to six weeks. In persons predisposed to eczema, an attack of this affection may follow. This should be borne in mind in giving a prognosis.

Local treatment is alone usually required. Of the innumerable remedies recommended from time to time in the medical journals, the majority owe their reputation to their success in curing isolated cases. In a disease like dermatitis venenata, which is so often self limited, a few cases successfully treated forms an insufficient basis for the recommendation of a new remedy. Fortunately there are a sufficient number of well-tried old remedies which are sufficient for a

cure in every case. These are for the most part sedatives and astringents. Dilute lead water is popular and useful. Black wash may be employed as a lotion, and sopped on the affected parts for a quarter of an hour at a time, every three or four hours during the day; to be followed by this ointment at night:—

R. Acid Carbolic..... gr. x-xx
 Ung. Aquæ Rosæ..... ℥j
 Hydrarg. Chlor. Mite..... gr. x. M.

Decoction of white oak bark is also useful. The following, recommended by Hardaway, of St. Louis, has done me good service:—

R. Zinci Sulphat..... ℥ss
 Aquæ..... Oj. M.

SIG.—Apply on cloths every hour through the day, and several times during the night.

The remedy, however, which I have used almost exclusively for the past five or six years, is the fluid extract of *grindelia robusta*:—

R. Ext. *Grindeliæ Robustæ*, fl'd., f℥ij
 Aquæ..... f℥j. M.

This is to be applied to the affected parts on cloths, which are to be thoroughly wet with the solution and then allowed to dry almost completely upon the skin, removing them when nearly dry and renewing the application, but not keeping the cloths constantly sopping wet, as with other sedative and astringent lotions.

Astringent powders may also, at times, find appropriate place, as on the face, when the patient is obliged to go about and cannot keep wet cloths, etc., applied. The following may be mentioned:—

R. Pulvis Zinci Carb. Præcip.,
 Amyli Oryzæ..... ℥j. M.

Or this,

R. Magnesii Carbonatis Levis,
Pulveris Lycopodii..... $\overline{\text{aa}}$ $\overline{\text{z}}$ ss. M.

Akin to Dermatitis venenata is that form of inflammation of the skin which is brought about by the use of *poisonous clothing*. Stockings or underclothing dyed with *aniline* red, yellow or brown morocco hat bands or shoe linings, or green tulle dresses, are among the forms of clothing most likely to give rise to dermatitis. *Tincture of arnica* and other medicinal agents sometimes give rise to dermatitis, and advantage is sometimes taken of the action of these remedies to produce feigned eruptions. (See *Feigned Eruptions*.)

Dermatitis Congelationis. "Chilblain." The inflammations of the skin produced by cold resemble in many respects those produced by heat, only, unlike burns, their course is slow. In addition, a certain morbid predisposition on the part of the patient is a necessary condition of their occurrence. The occurrence of chilblains does not necessarily depend on the influence of extreme cold; indeed, the affection is commoner in hot than in cold countries, and may occur at a temperature not below 32° F. Anæmic and chlorotic persons are more apt to be the subject of the affection.

The erythematous form of chilblain shows itself in the form of circumscribed patches, of a livid red color and somewhat tubercular character, the color disappearing under pressure of the finger. The lesions itch and burn painfully. They occur most commonly upon the fingers and toes, but may appear also on the ears, nose, or other parts of the face, or indeed on any part of the body which is exposed to cold. Their course is essentially chronic; usually they do not change in appearance, but sometimes become hard and infiltrated, while at other times, under the influence of pressure or rubbing, as of the shoe, or of scratching, a bleb or pustule

forms. The pain is then considerably increased, especially when the bulla or pustule bursts and leaves an ulcer. These changes, however, frequently lead to the cure of the affection, which might otherwise have lingered on indefinitely.

The bullous form of chilblain is formed under the influence of a more intense degree of cold, and is characterized by the formation of watery or sero-sanguinolent blebs, the size of hazel-nuts or goose-eggs. If they are not punctured they undergo no change for some time, but at last break, after having effected considerable destruction of tissue, the bones even of the feet and hands being occasionally laid bare and exfoliating.

The escharotic chilblain is simply a still more extreme degree of the same process, sloughs forming, which may be cast off without further effect, or which may poison the blood with fatal effect.

The treatment of chilblain is, first of all, in the way of prevention. A sufferer from this disease must not expect to be cured while continuing to expose himself to the influences which produced it. Warm and sufficient clothing, protection of the hands and feet, and in cases where the general system is below par, such medication and hygiene as will improve this condition, such are the points to which attention must first be paid. In mild acute chilblain, rest, in the horizontal position, frictions with cold water or snow, and astringent sedative lotions, as lead water, lotion of *grindelia robusta* (see *Dermatitis venenata*), or opiate washes, may be prescribed. In the more chronic forms of erythematous chilblain stimulant applications are called for. When unbroken the lesions may be painted with tincture of iodine, or better, with oil of peppermint, pure or mixed with one to six parts of glycerine. The following pigment is convenient of application:—

R. Tinct. Iodini..... ℥ j
 Ætheris f ℥ iiss
 Collodii f ℥ j. M.
 SIG.—Apply with a camel's hair brush.

When the lesions are broken, or in any case, this paint following forms an excellent application :—

R. Terebinth. Venetian ℥ iij
 Ol. Ricini..... f ℥ iiss
 Collodii f ℥ viiss. M.

SIG.—Apply with a brush as often as required to shield the chilblain from the air.

The following ointment may also be employed :—

R. Plumbi Acetat..... ℥ iiss
 Ol. Rapi (Colza)..... f ℥ j
 Vitel. Ovi..... j
 Ceræ Flavæ..... ℥ iss. M.

Carbolized cosmoline relieves the burning and itching.

The severer forms of dermatitis from cold belong rather to the province of the surgeon than the physician. When operative interference is not demanded, they are to be treated in a similar manner to burns of the like gravity.

Dermatitis Calorica. This subdivision includes the inflammatory symptoms produced by heat, in the form of burns. The treatment of such lesions ordinarily comes under the management of the surgeon, and need not therefore be referred to further.

Dermatitis Gangrenosa is a rare affection which has chiefly come into notice during the past few years, through a number of reports of cases published in the medical journals. It may be idiopathic or symptomatic. The idiopathic form is apt to occur symmetrically. It usually begins in the form of small or large, circular, erythematous, reddish or purplish spots, which may be tender and painful, or without sensation ; after undergoing a more or less variable course they become gangrenous

and slough, the process terminating fatally or in recovery; the latter event taking place sometimes in the gravest cases. There is usually some constitutional disturbance, fever, malaise debility, etc. Gangrenous patches may follow nerve lesions, or may occur, also, in connection with grave cerebral or spinal diseases, as in the form of acute bed-sore. These form the symptomatic form of gangrene. I have seen a case where a man who had recently suffered amputation of a leg, for a railroad accident, showed, within a week, lesions over the knuckles and on the right forearm, resembling at first a bullous erythema, and changing later to black sloughs, which were finally thrown off by ulceration.

In all cases of gangrene of the skin, and the like, care should be taken to exclude artificial and feigned diseases.

Dermatitis Herpetiformis (Duhring) is a rare disease, characterized by the formation of erythematous patches of an urticarial or erythema-multiforme-like character, herpetic vesicles, blebs, pustules, flat or acuminate, whitish in color, with a more or less inflammatory base, and papules, accompanied by violent itching. One or another of these various lesions may appear alone, or one may succeed another, or they may all occur together. This is the peculiarity of the disease, that sometimes it looks like herpes, sometimes like pemphigus, sometimes like urticaria or erythema, sometimes like pustular eczema or impetigo, and now and then, like all together. The lesions are apt to occur in clusters.

A variable amount of constitutional disturbance is present, especially with each new outbreak. The disease comes out in crops, tends strongly to relapse, and may run along for years. It occurs in both sexes, but is most often met with in the parturient state, and is a serious disease, the pustular variety being especially grave. It is very rebellious to treatment. It is a neurotic manifestation.

The treatment must be directed, on general principles, to suit each case ; no specific measures can be recommended.

Dermatitis Medicamentosa. Affections of the skin due to the ingestion of medicinal agents, are mostly of two classes, either a diffuse, erythematous, papular or petechial eruption, or an involvement of the glands, with the formation of pustules, furuncular or phlegmonous lesions. The drugs thus far known to have given rise to eruptions of the skin are as follows : *Arsenic* may give rise to dermatitis of an erysipelatous type, papular, urticariaform, vesicular and herpetiform eruptions. Pustular and furuncular eruptions are also said to have been observed. *Belladonna* gives rise at times to an erythematous or scarlatiniform, and sometimes to an erythematopapular rash. *Bromine*, or rather its salts, give occasion to the occurrence of maculopapular, pustular or phlegmonous eruptions. *Cannabis Indica* has been known to cause a vesicular eruption. *Chloral* may give rise to an erythematous condition of the skin, or to papular, urticariaform, vesicular, pustular, and now and then to more or less severe petechial eruption. *Copaiba* commonly gives rise to an erythematous or roseolaform eruption. Bullous eruptions have also been reported as due to this drug. *Cubebs* has been reported as causing a roseolaform eruption, and *Digitalis* a scarlatiniform eruption, with papular, erythematous lesions. *Iodine* alone, or in combination, often causes the appearance of eruptions of the skin, of which the form may be erythematous, papular, vesicular, bullous, pustular or hemorrhagic. Of these the pustular is the commonest, and, in its acneform variety, the best known. Occasionally it may assume a phlegmonous aspect, resembling some syphilitic eruptions. Mercury commonly gives rise to erythematous and scarlatiniform eruptions, though cases have been described where vesicles, bullæ, pustules and phlegmon have been observed. *Morphia* or *opium* usually gives occasion to a scarlatiniform

rash, which attacks the flexor surfaces by preference, and is sometimes followed by extensive desquamation. *Phosphoric acid* is reported in one instance to have given rise to a bullous eruption. *Quinine* and *Cinchona* now and then give occasion to the appearance of very striking eruptions, resembling the rash of scarlatina or measles, occasionally papular, urticariaform, hemorrhagic, or even gangrenous eruptions are found to follow the ingestion of these drugs. *Salicylic acid* now and then produces a scarlatiniform eruption, and cases have been reported where vesicular and petechial eruptions have followed its use. *Santonine* and *strychnia* have been reported in single instances as producing eruptions, as also have tar, carbolic acid, turpentine, rosin and petroleum. Other drugs are being added to the list, from time to time, as our knowledge and observation of the effects of remedies and of diseases of the skin increases.

The medicinal eruptions are at times difficult to make out, on account of their close resemblance to other affections of the skin. Their history and their rise and subsidence coincident with giving or withholding the drug will usually serve in assisting the diagnosis.

In addition to the above forms of dermatitis, other forms sufficiently distinctive to demand mention under an especial head will be found below. It must be observed that this subdivision of dermatitis is only provisional, and the designation must for the present be a sort of Tom Tiddler's ground, where diseases which can claim no other home in our nosology may find a place.

Dermatitis Exfoliativa (ii). This is a rare disease, characterized by the local or general occurrence of an acute erythematous, more rarely vesicular or bullous, inflammation of the skin, with more or less marked febrile disturbance, accompanied or followed by degrees of desquamation or exfoliation of the epidermis, and marked by a tendency to

relapse. The rash resembles that of scarlatina, and also that of pityriasis rubra and eczema universale. (See descriptions of the last two diseases.)

Dermatolysis (iv). Dermatolysis is an exceedingly rare anomaly of the skin, consisting in a more or less circumscribed hypertrophy of the cutaneous and subcutaneous structures, characterized by softness and looseness of the skin, and a tendency to hang in folds. It is a rare and very striking affection, and may occur over various parts of the body. Sometimes developing to an enormous size. Herr Haag, the "Elastic Skin Man," who has been exhibiting himself in various parts of the country for the past few years, presents a striking instance of an anomaly closely allied to dermatolysis. Here, however, a remarkable looseness and elasticity of the connective tissue, is the chief characteristic. The treatment of the circumscribed forms of the disease is removal by the knife, when this is practicable.

Dermatosyphilis. (See *Syphiloderma*, or *syphilis of the skin*.)

Dissection Wound or Tubercle (ii). The results of inoculation from dead bodies may be local, confined to the point of inoculation, or they may be general, producing severe constitutional disturbance. Usually the disease begins by the formation of a small vesicle or pustule on a hard, inflammatory base, or of a patch of reddish or violaceous induration, occurring at some point of inoculation, in an abrasion, etc. There is also burning, itching, with pain usually extending up the arm to the axilla, and lymphangitis, with constitutional symptoms. The wound, as soon as detected, should be thoroughly washed and sucked, or soaked in a solution of chloride of zinc, or burned with this caustic.

In other cases the disease is strictly local, being circumscribed, indurated and painful. The epidermis becomes thick and fissured, the sore secreting a thick or thin fluid,

resulting in a crust. In other cases the disease begins in a papule or tubercle, which may assume a warty character. To this the name of *verucca necrogenica*, or dissection tubercle, has been given. Its usual seat is about the fingers and joints. The course of the disease is chronic, and it is generally rebellious to treatment. Stimulating ointments, as the oleate of mercury ointment, 10 to 20 per cent. strength, nitrate of silver, caustic potash and acetic acid, are among the remedies usually recommended. A surgeon of much experience has recently advised that the warty lesions and skin around them should be steeped thoroughly in solution of the acid nitrate of mercury. This is to be repeated from time to time, as its effects pass away. It must be done repeatedly, at short intervals. Patience and perseverance for some months are required.

Driving in Eruptions. When, as formerly, skin diseases were supposed to be due to some "acid humor in the blood," which, in its struggle to escape by the emunctories of the skin, dealt destruction of tissues generally in rending its way out, physicians avoided most sedulously any attempt to "check the rash," for fear that, being prevented from escaping by this natural channel, the disease might "fall upon" some vital part. Some such view was extensively prevalent until quite recent years, and even now I fear that this superstition affords an easy way of escape, on the part of not too scrupulous physicians, from the treatment of obstinate and troublesome skin diseases, especially in children. Cases are occasionally cited, in which the "suppression" of an eruption has been followed by disease of the brain or lung, or by a still worse eruption somewhere else, and it has been imagined that the latter was effect and the former cause. But no particle of proof, or even of reasoning, has been brought forward to prove this notion, which, in fact, is as absurd as to imagine the general drying up of wells and

springs observed in the neighborhood of Vesuvius just before a volcanic outbreak must be the cause of that "eruption." For my part, there are many stubborn skin diseases which I should be only too glad to "drive in" or "dry up," either in my patients or my own person, were I thus afflicted, and I would cheerfully run any risk to be imagined by the advocates of acrid humors, rather than permit a painful and disgusting skin affection, as eczema, for instance, to go uncured.

Dysidrosis (ii). This is a more or less inflammatory disease of the skin, characterized by peculiar vesicles and blebs and an excoriated state of the skin, with maceration and exfoliation of the epidermis. Minute isolated vesicles appear deeply under the skin, which do not incline to rupture, and after a few days increase in size, assume a yellowish color, and look like boiled sago grains implanted in the skin. Later the vesicles rise above the skin, coalesce and form larger blebs, still showing no disposition to break and discharge. After some days the fluid is discharged or the blebs dry up, and desquamation takes place, leaving an abraded surface. There is no inflammation, as a general thing. The hands and feet are most apt to be affected, although the affection may occur elsewhere. After a time the epidermis may become macerated and sodden, and the skin is apt to be sore and painful. The disease may affect the backs of both hands and the forearms. Dysidrosis resembles eczema, but the history of its appearance and course, as just given, is different. Patients are apt to be nervous, weak and depressed. The treatment must be directed against the general symptoms, the local treatment being that of eczema, of a similar character and appearance. Authorities are much divided regarding the nature of the disease. Some think it a closure of the sweat ducts, and hence its name. Others think it simply a formation of inflammatory bullæ, occurring so often on the hands as to merit the title *Cheiopompholyx*.

Ecthyma (ii). Ecthyma is an inflammatory disease of the skin, characterized by the formation of one or more discrete, flat pustules, the size of a finger nail, situated upon a firm, inflammatory base, followed by an excoriated surface and a brownish crust. The pustules, generally well developed, may be single or numerous. They are notably flat, broad, and seldom fully distended. At first yellowish, they are later of a reddish color; in size they vary from a small to a large finger nail. There is usually a hard, red, tender areola. The lesions dry into flat crusts, of a dark brownish color, which, when raised, show an excoriation covered with a sanious excretion. The legs, shoulders and back are the seat of the lesions, which come out successively, day after day, while the attack lasts, each one lasting five to ten days. Sometimes there is a little feverishness before the outbreak of the eruption, which itself is accompanied by heat, itching, and a certain amount of pain.

Ecthyma is the outcome of want, misery and alcoholism; it occurs in persons who live in the slums, in prisons and in almshouses, and who have been subjected to privation. Improper and insufficient diet; the abstention from food, as in prolonged alcoholic debauch; want of ventilation; excessive work, and uncleanness are among the causes of the disease.

Ecthyma may be confounded with eczema pustulosum, impetigo, impetigo contagiosa, impetigo herpetiformis, and the large, flat, papular syphiloderm. From eczema it is distinguished by the size, form and discrete arrangement of its pustules, by the indurated base and the areola, the large, flat pustule, the excoriation, and the brownish or blackish crust. The character of the pustule and crust distinguishes it from impetigo or impetigo contagiosa. From the latter its non-contagious character and different distribution distinguish it. The history will distinguish it from impetigo herpetiformis.

From the large, flat, pustular syphiloderm, which ecthyma resembles closely in some respects, it is chiefly distinguished by its base, which is merely excoriated, whereas the removal of the crust in the syphilitic lesion shows an ulcer beneath, with pus. (See *Eczema pustulosum*, *Impetigo*, *Impetigo herpetiformis*, and *Syphiloderma pustulosum*.)

The internal treatment of ecthyma should be tonic and supporting. Good hygiene and diet are requisite. Rest, fresh air, bathing, cleanliness, with such nourishing food as milk, eggs, strong soups, etc., and in a few cases the moderate use of alcoholic and malt liquors, are all of the first importance. Iron, quinine, strychnia and the mineral acids are of especial value. Warm alkaline baths, to soften the crusts, when numerous, or cooling lotions, when inflammation is present, may be employed. The lesions should be dressed with some simple, slightly-stimulating ointment, as this:—

℞. Bismuthi Subnitrat..... ʒj
 Ung. Zinci Oxidi,
 Ung. Petrolii.....āā..... ʒiv. M.

Or, this:—

℞. Hydrarg. Chlor. Mite..... gr. x
 Ung. Aquæ Rosæ,
 Ung. Petrolii.....āā..... ʒiv. M.

The prognosis is favorable; a few weeks are generally enough in which to effect a cure, if the patient can follow out the treatment carefully.

Eczema (ii). Eczema is by far the most common of all diseases of the skin encountered in this country. The statistics of the American Dermatological Association for the past five years show that out of 58,617 cases of skin diseases, occurring in all parts of the United States and Canada, no fewer than 18,525, or nearly thirty-two per cent., were cases of eczema. When we add to this the fact that most cases of eczema are either disfiguring to the personal appearance or

are accompanied by more or less burning, itching or other uncomfortable and painful sensations, it must be admitted that this disease is the most important of all for the physician to know and to treat intelligently.

Eczema is an inflammatory acute, or chronic, non-contagious disease of the skin, characterized at its commencement by erythema, papules, vesicles or pustules, or a combination of these lesions, accompanied by more or less infiltration and itching, terminating either in discharge, with the formation of crusts, or in desquamation. It is eminently a protean disease. At one time it begins as an erythema; later this may become moist and secreting, and finally terminate in a thickened, dry and desquamative surface. At another time the affection may begin in the form of vesicles or pustules, with swelling and heat. These soon burst, and a red, weeping surface results, which is soon coated with bulky crusts from the drying of the liquid, gummy discharge. The character of the patch may then suddenly change, and instead of a weeping surface there may exist a dry, scaly, infiltrated, fissured piece of skin, which continues until the disease is removed. Or, again, papules may first appear; these may remain as such throughout their course, or may pass into other lesions, or they may be associated sooner or later with vesicles.

There is no other disease of the skin in which the lesions undergo such sudden and manifold changes, and every variety may manifest itself in turn upon the same individual.

More or less itching is almost always present in eczema. It may vary in degree from the merest titillation to unendurable torture. Sometimes burning takes the place of itching; at other times they occur together. But *eczema is the itching disease, par excellence.*

Eczema may be acute, running its course in a few weeks and then permanently disappearing, or it may be chronic

and continuous, or recurring through years. It may occur in small patches single or multiple, or more rarely covering extensive surfaces. Unless very extensive it is not ushered in by constitutional symptoms.

The varieties of eczema are named according to the lesions which the disease assumes at its beginning. These are as follows:—

Eczema erythematosum. This form shows itself in typical cases, first as an undefined erythematous state of the skin, occurring in small or large patches without discharge or moisture. Commonly the patch, which is sometimes slightly infiltrated, is covered with fine, thin scales of epidermis, and now and then the surface is slightly excoriated. The skin may be bright or dark red, or even violet. It often has a yellowish tinge. It is occasionally mottled. The process may affect a small surface or a large one; it is often better one day and worse the next, as it may even go away entirely only to return a little later. It is apt to be chronic, and the relapses are annoying and discouraging, especially in winter time. The influence of exposure to external heat or cold, a heavy meal or indulgence in alcoholic drink, is apt to be followed by an exacerbation of the disease. Burning and itching, alone or together, are prominent symptoms. *Eczema erythematosum* may run its course as such, or may develop into *Eczema squamosum*. Vesicles or pustules are rarely seen. *Eczema erythematosum* is most apt to occur upon the face and genitals.

Eczema vesiculosum. Vesicular eczema commonly begins by a feeling of heat and irritation in the part, which shows a diffused or punctate redness, with itching and burning, and small vesicles soon show themselves, either alone or grouped, or sometimes running together. They are soon filled with a yellowish, gummy fluid, and then they ordinarily break and form a crust. Sometimes, however, the vesicles simply dry

up without breaking. In more marked cases new crops of vesicles continue to come out, and when a considerable surface is covered, the quantity of fluid poured out is quite large, and the underclothing or dressings are saturated. When the secretion dries, it is very sticky and tenacious, and this is characteristic of this form of eczema. Typical eczema, as described, is not as common as the more complex varieties when the lesions are multiform; papules, papulo-vesicles, vesicles, pustules and other lesions being found in conjunction. The two chief characteristics of this form of eczema, wherever found, are the itching and the gummy secretion, leaving a yellow stain upon the linen. Patients are almost always struck by this feature.

Vesicular eczema may occur in very small patches, or in quite extensive areas. As it shows itself in children over the face and scalp, it forms the eruption popularly known as *milk crust*, *scald head*, *tooth rash* or *moist tetter*.

Eczema pustulosum (*Eczema impetiginosum*). Pustular eczema is very much the same in its original appearance as vesicular eczema, only that the lesions assume the form of pustules rather than of vesicles. There is usually less heat and itching. A strict line cannot be drawn between the two forms, for they are apt to run into each other, and may coexist on the same subject and in the same patch. The scalp and face are favorite seats of pustular eczema, and it is apt to occur in children who are badly nourished or who are being brought up by hand. It also occurs in ill-fed and scrofulous adults. The same causes which would bring on vesicular eczema in a tolerably healthy individual will arouse the pustular form in a poorly nourished person. For this reason pustular eczema always calls for tonic and supporting treatment.

Eczema papulosum. Papular eczema appears in the form of small, round or acuminate papules, varying in size from a small to a large pin's head. In color the lesions are bright

or dusky red, sometimes violaceous. They may be discrete, or may run together, forming large patches, and these are often infiltrated. Now and then they become abraded and moist, forming eczema rubrum. Papular eczema is apt to occur on the arms, trunk and thighs, especially the flexor surfaces. It may involve a very small surface, or it may cover a large area of the body, and it is apt to be the most stubborn, troublesome and annoying of all the forms of eczema. Itching is the most prominent and troublesome symptom; at times this is agonizing. Patients tear and gash themselves, in their efforts to gain relief, and I have seen chronic cases where the nails have been worn to the quick and the ends of the fingers polished by the almost ceaseless efforts of the patient to assuage the torment, if only for a moment.

Eczema rubrum. This must be regarded rather as a secondary condition resulting from previous morbid action, than a distinct variety. It is a variety only in a clinical sense. It may result from eczema erythematosum, vesiculosum, pustulosum or papulosum. In eczema rubrum the surface of the skin is inflamed and infiltrated, red, moist and weeping; occasionally it is more or less covered with yellowish or brownish crusts, often completely overspreading the part. Unless artificially detached, these crusts may sometimes continue to adhere, the process of exudation meanwhile going on underneath. Under these circumstances the appearance of a rough, dirty, yellowish or brownish scale is observed, instead of the shining, red, oozing surface. Eczema rubrum may occur upon any part of the body, although it is most commonly found upon the legs or the flexures of the joints, particularly the former. The swollen, infiltrated, violaceous, red leg of eczema rubrum, with its varicose veins, its glazed and shining, or raw surface oozing serum at a thousand pin-head orifices, and furiously itching and burning, is a characteristic spectacle not to be forgotten when once seen.

Eczema squamosum. Scaly eczema is an important clinical variety of the disease. Like *E. rubrum*, it follows and results from the erythematous, vesicular, pustular or papular forms of the disease. It is particularly apt to succeed erythematous eczema. When typical, it shows itself in the form of variously sized and shaped reddish patches, which are dry and more or less scaly. The skin is always more or less infiltrated or thickened. Squamous eczema may be only an ephemeral stage in the evolution of the disease. More commonly, however, the term is applied to denote a chronic condition, which may last for a long time.

Other lesions are encountered in eczema which are worthy of mention. These are *rhagades* or fissures, occurring when the diseased and infiltrated skin becomes cracked by flexure, as about the joints or at the margins of the lips or anus. Chapped hands, for example, are typical instances of fissured eczema. Sometimes eczema may assume a warty condition, and at other times hard, sclerosed patches may form.

In addition to the clinical varieties of eczema above described, the disease may fitly be divided into varieties, according as it assumes the *acute* or *chronic* form. The division, which is a distinct one, refers not so much to the actual duration of the disease, as to the pathological changes which occur during its course. When the general inflammatory symptoms are high and the secondary changes insignificant, the disease may be said to be acute. When, however, the process has settled into a definite course, the same lesions continually repeating themselves, accompanied by secondary changes, the disease is to be considered chronic.

Eczema is, as I have said, by far the commonest of all skin diseases. It attacks persons in all grades of society, and occurs at all ages and in both sexes. In some cases it appears to be, in a certain sense, hereditary. I have found it commonly in the children of persons of light complexion, with

fair to reddish hair, with a tendency to scrofulous affections. Some persons are so prone to eczema that the slightest provocation will bring on the eruption, and an attack of dyspepsia, which in another person would have no effect on the skin, or contact with an irritant which in most persons would only cause a transient dermatitis, are, in such individuals, a sufficient cause to bring out an eczematous eruption. Dyspepsia and constipation are among the commonest constitutional causes of eczema. In certain individuals the presence of an excess of uric acid and urates in the system is sufficient to produce and keep up eczema. The occurrence of gout and rheumatism in connection with eczema has often been alluded to by writers. I am inclined to think, however, that gout is among the rarer exciting causes. It is certain, indeed, that this disease is rare among the younger generation in Philadelphia; and I may say, so far as my personal experience goes, that, in between three and four thousand cases of eczema which I have treated, not more than two or three have occurred in connection with the gouty diathesis. Improper food, as to quantity and quality, acts as an exciting cause. During a period of commercial depression which occurred some ten years ago, I found many working people the subjects of eczema, clearly brought on or much aggravated by coarse and insufficient food. It is, however, among infants and young children that this cause of eczema most frequently comes into play. Pregnancy and lactation, debility, nervous exhaustion, excessive mental or bodily work, dentition, vaccination, internal irritation, as of ascarides or tænia in the bowels, may also determine the eruption of eczema.

Eczema is not contagious. It cannot be acquired from being in contact with or handling the discharge.

Among the local causes of eczema, which are numerous and important, and which give rise to the condition known as "artificial eczema," are certain cutaneous irritants, as

croton oil, mercurial ointment, tincture of arnica, tincture of cantharides, mustard, antimonial ointment, sulphur and turpentine. Here also may be mentioned the rhus venenata and toxicodendron, the poison oak and ivy. All these irritants, and especially the latter, usually provoke dermatitis (see *Dermatitis venenata*), yet may, in certain individuals and under certain circumstances, give rise to true eczema. Heat and cold, excessive perspiration, especially about the genitalia, and other places where the skin inclines to form folds, may give rise to the affection, which under the latter circumstance is known as *eczema intertrigo*.

Eczema is of much commoner occurrence in the winter than in the summer. The atmosphere of January and February, and particularly the cold bleak weather of March, seem to favor the occurrence of the disease.

Many cases of eczema get well in summer only to recur again in winter. Water, as in water dressings or in fomentations, or in the inordinate use of bathing, may be a cause of eczema. The insensate declamation against filth, or want of personal cleanliness, as an almost universal cause of skin diseases, which is too common, not only among superficial writers, but among physicians who ought to know better, would in many cases be better replaced by a caution against excessive ablution. The custom of very frequent bathing, especially when soap is used, is often harmful to the skin to a considerable degree. Alkalies, acids, strong and harsh soaps, may give rise to chapping and fissuring of the skin and to eczema. Some years ago, when *sapo viridis* was first introduced, and when the view that it was in some way a specific against skin diseases was prevalent, I frequently saw severe and extensive eruptions of eczema, which had been brought about by the injudicious and improper employment of this semi-caustic application. Finally, among the local causes of eczema, may be mentioned the irritation caused

by the presence of lice and itch mites, together with the scratching to which they give rise.

The diagnosis of eczema is of great importance, especially as the disease shows itself in such protean forms. There are, however, certain features of eczema, one or more of which are present in every form of the affection, and these may serve to aid in the diagnosis. Inflammation of the skin exists in a greater or less degree in all cases of eczema. It is indicated by a certain thickening of the skin, which may usually be seen by the eye, and in most places detected by rolling a small pinched-up portion of the skin between the finger and thumb. Swelling and oedema exist in all acute eczemas, and often in chronic cases. The patch is red and congested. In most cases of eczema there has been more or less fluid exudation or moisture, at one stage or another, in the history of the disease. This is termed weeping, discharging or running. The fluid may be clear, limpid and yellowish, turbid and puriform, or it may contain blood. This discharge is a most characteristic feature of eczema, and is not present in any other disease. The crusts formed by the drying up of the discharge are characteristic. When this has been copious the crusts form rapidly, and in quantity so as sometimes to cover and mask the skin. They are yellowish, brownish or greenish in color, and when removed show a moist surface beneath. Among the most important diagnostic symptoms of eczema is the subjective one of itching. It is often intense, being more marked than in other diseases. It is never altogether absent, though it may vary much in degree. Burning is also a not unfrequent subjective symptom, being more apt to be present in erythematous eczema, and often giving way to itching as the disease progresses. The itching of eczema often gives rise to an irresistible inclination to scratch, as was noted in speaking of the papular variety of the affection.

The diseases with which eczema is most likely to be confounded are the following:—

Erysipelas sometimes resembles eczema erythematosum, especially as it occurs upon the face. It is, however, acute; it begins at a given point and creeps slowly from place to place. The inflammation is a deep one; the surface is smooth, shining, tense and more or less dusky red, while deep infiltration, œdema, heat and swelling exist underneath. Erysipelas is also accompanied by considerable fever and constitutional disturbance. There is no discharge from erysipelas save that from bursting bullæ, which sometimes form during the latter stages of the disease.

Urticaria, particularly that variety accompanied by the formation of small, papular lesions, is occasionally mistaken for eczema papulosum. The irritable condition of the skin, the history of itching and burning occurring before the appearance of the lesions, all characterize urticaria in contradistinction from eczema.

Herpes zoster sometimes resembles eczema vesiculosum, but is distinguished from it by the arrangement of the vesicles, the more regular grouping of the lesions of zoster along the line of some well-known nerve trunk, and the ordinary recurrence of neuralgia in connection with the zoster eruption.

Pityriasis, as it occurs upon the scalp, is often very difficult to distinguish from eczema squamosum occurring in the same locality. The difficulty of diagnosis is occasionally enhanced by the simultaneous occurrence of both affections upon the same individual. In eczema, however, the scales are larger, less abundant and dryer than in pityriasis. Eczema is more apt to occur in a patch on the scalp, while pityriasis is more generally diffused. The skin in eczema is usually red and inflamed, and is always itchy; in pityriasis it may be even paler than normal, and may have a dull, leaden hue. It is commonly less itchy, also.

Psoriasis is often confounded with eczema, the disease, when occurring in limited patches or upon the scalp, being sometimes almost indistinguishable. Old, infiltrated, inflammatory patches are especially difficult to make out, but in psoriasis the edges usually terminate abruptly, while in eczema they are more apt to fade into the surrounding skin. The scales on eczema patches are thin and scanty ; on the patches of psoriasis they are comparatively more abundant, larger, silvery and imbricated. In eczema there is usually some history of moisture or weeping, in one stage of the disease or another ; in psoriasis the process is always dry. The distribution of the disease, and the occurrence of patches on other parts of the body, may aid in the diagnosis. In doubtful cases, where only a few scattered lesions are presented for examination, the whole surface should be diligently searched over, for a single lesion in some part of the body may, by its typical aspect, betray the nature of the disease where the majority of the lesions are quite doubtful in appearance.

Lichen ruber may be confounded with eczema, but the peculiar shape of the lesions in lichen ruber planus, to be described further on, together with their dusky hue, and the fact that they usually run a quiet, chronic course, without change, and leave a deep stain behind, all seem to distinguish this affection from eczema.

Pityriasis rubra is a very rare disease, and is so seldom met with in this country (but two authentic cases, I believe, being on record), that it is not likely to be encountered. It presents symptoms, however, which resemble closely those of generalized erythematous and squamous eczema. It may be distinguished, however, by its universal redness ; great masses of large, thin, papery, whitish, epidermic scales, which continually reproduce themselves ; slight itching ; burning heat ; and, lastly, by the absence of marked infiltration, and thickening of the skin, a symptom common in eczema. It undergoes but slight changes throughout its course.

Tinea circinata is sometimes mistaken for eczema, but the course of the two diseases is quite different, and the microscope will almost invariably settle the question of diagnosis by showing the presence or absence of the characteristic fungus of tinea. *Tinea tonsurans*, in its milder and more chronic stages, may readily be mistaken for eczema; the diagnostic points will appear in the description to be given of that affection later on.

Sycosis, both of the parasitic and non-parasitic varieties, sometimes resembles eczema of the beard. The former, however, is scantily crusted, and when the crusts are removed, instead of the smooth, soft surface of eczema, a rough, dusky-red, mamillated surface is revealed. The loose hairs are also loaded with the characteristic microscopic fungus about their roots. *Sycosis non-parasitica* is essentially an inflammation of the hair follicles, and while eczema is superficial, sycosis leaves the surface alone and attacks the follicles only.

Favus, a disease of rather rare occurrence in this country, sometimes resembles eczema; but the peculiar canary-yellow color of the favus crusts is almost unmistakable, and the microscope will quickly settle the question of diagnosis, for the peculiar fungus of favus is very abundant in the lesions of this disease.

Scabies is very likely to be confounded with eczema, and the diagnosis is often difficult. This can easily be understood when it is considered that the eruption of scabies is, in fact, largely an eczema. Eczema, however, does not show the marked preference for certain localities, as the hands and fingers, buttocks, axillæ, abdomen, mammæ, nipples and penis, which scabies displays. But, chiefly, the presence or absence of the peculiar burrow of the itch insect will decide almost infallibly between the two affections, and the success or non-success of the anti-parasitic treatment will settle the question.

Syphilis. Eczema of the scalp is at times liable to be mistaken for syphilis. There is a form of pustular eczema,

characterized by the presence of a few scattered lesions of the scalp, without a sign of disease elsewhere, which it is sometimes difficult to differentiate from the pustular syphiloderm of the scalp. The occurrence or absence of a history of syphilis, or of concomitant syphilitic lesions in other parts of the body, and the success or failure of a treatment other than anti-syphilitic, will demonstrate whether one or the other affection is present. Occasionally fissures with abundant purulent secretion occur on the scalp in the course of syphilis, and this form of the eruption may closely resemble confluent pustular eczema. I met with such a case some years ago, where the diagnosis was extremely difficult, and where the ordinary anti-syphilitic remedies even failed for a time to give relief. The disgusting odor which ordinarily accompanies the discharge from this form of syphilitic disease, will usually, however, serve to distinguish it.

In a work like the present it is obviously impossible to do more than indicate, in a general way, the plans of treatment suitable for the various forms of eczema. The reader is referred to the larger works on skin diseases, and especially to the various monographs, as those of McCall Anderson and Bulkley, which deal with the subject in a more comprehensive manner.

Eczema is a perfectly curable disease, but for its relief both internal and external remedies must at times be employed. Constitutional remedies judiciously employed are almost always needful, and prove of decided benefit in the majority of cases. In some cases, as where the eruption is local and due to some external irritant, or where it is exceedingly limited in extent, no internal measures are called for. The subject of diet must be carefully attended to; all articles which are difficult of digestion must be avoided, and especially salt or pickled meats, pastry, cabbage, cheese and beer, or wine.* The bowels should be carefully regulated;

* See Appendix, on Diet in Diseases of the Skin.

dyspepsia is often the sole exciting cause of eczema, and the physician who desires to treat this affection in any of its forms with success, should be prepared to deal with dyspepsia in the majority of cases. The condition of the kidneys should be looked into. Diuretics are frequently of value. Saline laxatives are frequently called for in the treatment of eczema, and among these the following tonic aperient, to which the name of "Mistura ferri acida" has been given, is one of the best:—

R. Magnesii Sulphatis..... ℥j
 Ferri Sulphatis..... gr. iv
 Sodii Chloridi..... ℥ss
 Acidi Sulphurici dil..... f℥ij
 Infus. Quassiae.....ad..... f℥iv. M.

SIG.—A tablespoonful in a tumbler of water, before breakfast.

This preparation, though extremely disagreeable on first taking, becomes much less revolting after using for a short time, and even delicate women can take it readily. It is important that the full quantity of water should be taken, as the volume of fluid seems to influence the action of the medicine. Sometimes hot water is less unpalatable with this mixture than lukewarm or cold water. In some cases, especially in winter time, the proportion of magnesium sulphate must be increased. The laxative mineral spring waters, as the Hathorn and Geyser springs of Saratoga, or the Friedrichshall, Hunjadi Janos and Ofener Racoczy, among German mineral waters, the latter mentioned in the order of their increasing purgative properties, are beneficial in many cases. I like the Hunjadi Janos best for most cases, and I sometimes prescribe it after a short course of the mistura ferri acida, as its use can be kept up indefinitely without an increase of dose. In infantile eczema, where constipation exists, the simple unsipped syrup of rhubarb, in repeated small doses alone or with magnesia, is often found desirable. A very

good powder (though powders are disagreeable prescriptions for children, I know not what to substitute for this), is the following:—

R. Hydrarg. Chlor. Mite..... gr. xij
 Pulv. Rhei..... gr. xvij
 Magnesii Calcinat..... ʒ ss. M.
 Div. in Chartæ No. vj.
 SIG.—One, at night.

This is for an infant six months to a year old, of average strength. In weakly infants the dose of calomel and rhubarb should be slightly reduced. The powder should be continued until its effect is seen. Purgation, however, should not be induced. A somewhat similar prescription, in a fluid form, is the following:—

R. Pulv. Rhei,
 Sodii Bicarb.....āā..... ʒ i-iiij
 Aquæ Menth. Pip..... f ʒ iv. M.
 SIG.—A teaspoonful, after meals.

In adults, especially when the eczema is acute, and occurs in a robust, sthenic individual, the laxative treatment is best introduced by a brisk mercurial purgative. Especially is this the case when the patient is suffering from constipation when first seen. Here the bowels are to be thoroughly unloaded, to begin with, and then we may enter upon the more direct treatment of the disease. It is wonderful to see what a good effect two or three compound cathartic pills, or six grains of blue mass, given the evening before beginning the administration of *mistura ferri acida*, will have on the patient's comfort, external and internal. Some good authorities, I know, deprecate the employment of cathartics in the treatment of eczema, but the general experience is in favor of thus beginning the treatment,—in acute inflammatory eczema, be it understood, and this is certainly my advice. Afterward let the case be treated internally, on general medical prin-

ciples, and let cathartics and laxatives be given or withheld, as the patient's condition suggests. In old persons, particularly when the patient has been a high liver or is rheumatic, or in those unusual cases where a gouty element may exist, diuretics and alkalis are indicated. In such conditions the following prescription was recommended by the late Tillbury Fox:—

R. Magnesii Sulphat..... ℥iv
 Magnesii Carbonat..... ℥j
 Tinct. Colchici..... ℥xxxvj
 Ol. Menth. Pip..... ℥ij
 Aquæ..... f℥vij. M.

SIG.—Two tablespoonfuls in a wineglass of water, every three or four hours.

The acetate and carbonate of potassium in full doses, and also the alkaline mineral waters, may be employed. In persons of debilitated constitution or in scrofulous persons, particularly in the badly-nourished children of tuberculous parents, cod-liver oil is demanded, and is frequently very useful. Iron in various forms is to be recommended in some cases. The following prescription is one which I often employ with satisfaction:—

R. Tinct. Ferri Chlor.
 Acidi Phosphorici dil... f℥j
 Syrupi Limonis..... ad... f℥iv. M.

SIG.—A teaspoonful in a wineglass of water, after meals.

Syrup of the iodide of iron and wine of iron are also eligible preparations, particularly for children. Quinine and strychnia are sometimes called for by the general condition of the patient. Arsenic is useful in a limited class of cases, more especially in the chronic papular form and the squamous stage of the affection. In former times the use of arsenic in eczema of all grades and varieties was much abused, and even now it too often forms a part of that routine treatment which

is the refuge of ignorance. Frequently, so far from doing good, it does harm by upsetting the stomach, and its use is particularly pernicious in the acute and inflammatory forms of the disease. An admirable *résumé* of the value and indications for the employment of arsenic in skin diseases in general is given by Duhring in his treatise. Tar has been used in some chronic cases internally, with benefit. Sulphur-spring waters are also said to be useful occasionally. I have no personal experience with regard to these latter remedies.

Regarding the local treatment of eczema, ordinary water may be employed for washing purposes, in most cases; when the skin is delicate and sensitive, distilled water or water made milky by the addition of some bran or starch. A very good method of softening the water, particularly where it is to be applied to the face, is to take a handful of bran, sew it up in a small linen bag, and squeeze the bag, like a sponge, through a basin of water until the water is quite milky. This gives a soft and agreeable quality to the water when it is applied to the skin. The water may be used cold or warm, as best suits the feelings or fancy of the patient; but the most important point is not to use too much of it or too often. The best rule for the use of water in eczema is to use it as seldom and as sparingly as possible. The only two indications for its employment are either the removal of crusts or the cleansing from absolute and unendurable soiling; water sometimes seems to act upon the eczematous skin almost like poison. White castile soap is ordinarily the only soap necessary to cleanse the skin of crusts and scales, but occasionally the stronger potash soaps, the ordinary household soft soap, or the "*sapo viridis*" of Hebra, must be brought into use. Sometimes the "*spiritus saponis kalinus*," or solution of two parts of *sapo viridis* in one part of alcohol, may be used instead of the solid soaps. Whatever soap is employed, it should always subsequently be completely washed

off the skin, unless a distinctly macerating or caustic effect is desired.

The local treatment of eczema is of great importance; many cases can be cured by outward applications alone, and there are very few where these can be dispensed with entirely. Before instituting local treatment, the part affected should be examined, with the view of determining whether the disease is acute or chronic, and what the characteristic lesions, the amount of heat, redness, swelling, etc.; and also the condition of the epidermis, whether intact or torn and abraded. It is most important, also, to ascertain the area involved, whether this be great or small, for not only must we be on our guard not to use irritant remedies, but it must be remembered also that some applications are poisonous by absorption, when applied over large raw surfaces.

In most cases of eczema there are certain secondary products, crusts, scales and extraneous matter, which must be removed before the local remedies can be advantageously applied. Sometimes it is difficult to get patients to remove these extraneous matters; a feeble attempt is made, giving rise, perhaps, to pain or slight bleeding, and the statement is offered that the "scab" cannot be gotten off. The mass of rancid grease, decomposing pus, serum and sebaceous matters, mingled with epithelial debris, make a very poor covering, however, for an abrasion or ulcer which is to be healed, or to which local treatment is to be applied successfully. The physician should give the most precise directions as to the method of removing the crusts or, better, should, when practicable, remove them himself. Soap and water alone will not do this. Poultices made with hot almond oil, applied to the crusts after these have been themselves thoroughly saturated with the oil, will often suffice. At other times, compresses wrung out of hot water and covered with oiled silk will do better. Frequently a strong solution of carbonate of sodium,

also applied on compresses, will soften crusts more rapidly than anything else. Sapo viridis spread on linen rags, like ointment, laid on the skin and covered with waxed paper or oiled silk, will soften the most stubborn crusts. Crusts in the scalp sometimes cling stubbornly, on account of the numerous hairs running through them. By lifting the edge gradually, and cutting away the hairs from underneath, the crust can be lifted expeditiously and without pain. I dwell on this little point because I have so often seen well directed treatment fail of its intention, because the way had not been prepared for the local remedies.

Two general principles may be mentioned with regard to the local treatment of eczema. These are, first, that in the acute form the treatment can scarcely be too soothing; secondly, that in the chronic form the treatment can hardly be too stimulating. Of course, these general principles must be modified somewhat, according to individual circumstances, especially with regard to the latter.

Acute eczema. When a remedy is to be applied for the first time to a case of acute eczema, it is usually better to use it over a limited area until its effect is perceived, for it must be borne in mind that a remedy which has been of service in one case will not necessarily suit another, even when the general features of the disease are the same. If one remedy does not suit, another must be tried, for it is often difficult to decide beforehand what application will be most useful. The indication is to give ease to the patient, and medicaments must be changed, if necessary, until this end is attained.

In acute vesicular or erythematous eczema, water is, as a rule, injurious, and irritates the skin. It should never be used, except in cases of extreme necessity, for the absolute needs of cleanliness. Patients, especially those belonging to the more refined classes, will sometimes rebel when, for

instance, they are desired to abstain from washing the face; but occasionally uncleanliness, or what passes for such, must be enforced. In the place of washing, the face or other parts may be powdered, from time to time, with a dusting powder, such as the following:—

R. Pulvis Camphoræ..... ℥ ss
 Pulvis Zinci Oxidi..... ℥ iss
 Pulvis Amyli..... ℥ vj. M.

The following plan of treating acute vesicular eczema is that of Dr. James C. White, of Boston, which I learned from Dr. Duhring, and have used in hundreds of cases with great satisfaction. I consider it perhaps the best treatment for the majority of cases. The affected part is to be bathed with lotio nigra, the black wash of everyday use, either in full strength or else diluted with an equal part of lime water, and daubed over the surface by means of a rag or mop (not a sponge, as this absorbs the sediment), or applied by means of cloths saturated with the wash and allowed to remain on the surface. As a substitute for the ordinary wash, the following, nearly the same in character, may be used, especially on the face, as it clings better to the skin:—

R. Hydrarg Chlor. Mite..... gr. lxxx
 Mucilago Tragacanthæ..... ℥ j
 Liquoris Calcis.....ad..... ℥ viij. M.

After the wash has been applied for some minutes, oxide of zinc ointment, or in winter the following—

R. Pulv. Zinci Oxidi..... gr. lxxx
 Ung. Aquæ Rosæ,
 Ung. Petrolii.....āā..... ℥ iv. M.

is applied gently with the finger, before the surface has had time to dry; and this treatment is repeated at intervals of a few hours. As a rule, the itching and burning is relieved at once, and occasionally the disease is arrested in its course.

Sometimes the wash may be applied every half hour or hour, the ointment being laid on at longer intervals. I have often found the following lotion useful; it is to be applied on cloths:—

R. Liq. Plumbi Subacetat dil..... Oss
Glycerinæ..... f℥ ss. M.

When there is a good deal of inflammatory action, and when the skin is thickened and more or less doughy and œdematous, I am in the habit of employing bread poultices, made of bread crumb mixed with ice-cold lead water. The sedative effect of this application is sometimes extremely soothing and grateful. The following lotion is highly recommended in some cases:—

R. Pulv. Calaminis... ℥ j
• Pulv. Zinci Oxidi..... ℥ ss
Glycerini ℥ ij
Aquæ..... f℥ vj M.

It should be applied frequently, by means of a bit of rag or a rag mop, the sediment being allowed to remain on the surface. I think it would be better to substitute precipitated carbonate of zinc for the calamine, as this is usually a gritty powder, of a spurious character, being really carbonate of baryta.

Another very good remedy, in my experience, and one particularly adapted to the treatment of eczema covering a considerable surface, is the following:—

R. Ext. Grindeliæ Robustæ fld.... f℥ ij
Aquæ..... Oj. M.

This is preferably applied on cloths, which are permitted to remain in contact with the surface until nearly or quite dry, before removal. A lotion of sulphate of zinc, fifteen to thirty grains to the pint of water, acts admirably in some cases, especially if eczema about the hands. When itching is a severe and prominent symptom, applications of hot

water, or of cloths wrung out of the same and applied in quick succession, as hot as may be borne, to the affected skin, often allay this exasperating symptom when all else has failed. Carbolic acid, which is one of the most efficient anti-pruritics, can rarely be employed in the acute stages of eczema, but now and then, when burning is less prominent as a symptom, and when itching is most tormenting, it is of use. I often combine it with black wash, as thus:—

R. Acidi Carbolic.	ʒ ij	
Glycerinæ.....		f ʒ j	
Lotio Nigræ.....		Oj.	M.

I find that the erythematous form of eczema, when the skin is yet unbroken, and when there is at the same time more or less inflammatory infiltration, is that in which carbolic acid is likely to agree. It must be applied with caution, however, in the acute stage of eczema, until it is found to agree with the individual case under treatment.

While, as a general thing, ointments are not found to agree in acute eczema, yet in a certain number of cases these preparations appear to suit better than lotions. The oxide of zinc ointment, that hard ridden and universal remedy for skin diseases, here finds its legitimate sphere. Bulkley recommends that instead of being made with lard it should be made with cold cream, and should contain sixty instead of eighty grains of the oxide of zinc to the ounce. Both of these changes are, I think, improvements. Practically, I find the oxide of zinc ointment, as dispensed, too thick and almost tough, especially for winter use in this climate. So, for convenience sake, I ordinarily prescribe it mixed with an equal weight of vaseline or cosmoline. It should not be benzoated, or if benzoin is used it should be used in small quantity. The unguentum aquæ rosæ is a much better base for all or almost all ointments than lard or vaseline. The first is apt to turn rancid, while the second is too thin for

ordinary use, although preferable on this very account for use in the hairy parts.

Oleate of zinc, originally brought into notice by Crocker, of London, in 1878, enters into the composition of a number of ointments which are of frequent value in the treatment of acute eczema. It is made as follows: Take one part of oxide of zinc, and eight parts of oleic acid; stir together; allow to stand two hours; heat until dissolved. On cooling, a yellowish-white, hard mass results, which may be variously made into ointments. The following is one formula:—

R. Zinci Oleat.,
Olei Olivæ.....āā..... ℥iv. M.

Or it may be made up with cold cream:—

R. Zinci Oleat.,
Ung. Aquæ Rosæ.....āā..... ℥iv
Olei Amygdalæ..... q. s. M.

Oleate of bismuth acts in very much the same manner. The following formula, brought into notice by Dr. McCall Anderson, is an elegant preparation when prepared with due pharmaceutical skill:—

R. Bismuthi Oxidi..... ℥j
Acidi Oleici..... ℥j
Ceræ Albæ..... ℥iij
Vaselini..... ℥ix
Ol. Rosæ..... ℥ij. M.

Subnitrate of bismuth is a very agreeable and slightly astringent as well as sedative remedy, when used in the form of ointment.

The following—

R. Pulv. Bismuth Subnitrat..... ℥ss-℥j
Ung. Aquæ Rosæ..... ℥j. M.

is an excellent application in acute eczema of the scalp, particularly in children.

Diachylon ointment, made according to the formula of Hebra, with due care, and by a skilled pharmacist, is of all ointments the most grateful and soothing to the inflamed skin. I have, however, so frequently met with disaster in having this ointment made up by chance apothecaries, or at long intervals, that I have almost given up its use. I give the method of its preparation here, so that any one who may be fortunate enough to be able to depend upon first-class and conscientious pharmaceutical skill may have recourse to this prince of ointments. It is composed as follows :—

℞. Olei Olivæ Opt.....	f℥ xv
Pulv. Lithargyri	℥ iij—℥ vj
Aquæ.....	q. s.
Coque. Fiat unguent.*	

Diachylon ointment is usually more effective when spread upon cloths than when rubbed in with the finger, and, in fact, the same may be said of all ointments applied with a view to their soothing effect. I usually bid the patient cut

* The following directions are taken from Duhring: “The oil is to be mixed with a pint of water and heated, by means of a steam bath, to boiling; the finely-powdered litharge being sifted in and stirred continually; the boiling is to be kept up until the minute particles of litharge have entirely disappeared. During the cooking process a few more ounces of water are to be added, from time to time, so that, when completed, water still remains in the vessel. The mixture is to be stirred until cool. The ointment is difficult to prepare and requires skillful manipulation. When properly made it should be of a light yellowish color, and of the consistence of butter. To ensure a good article it is essential that the very best olive oil and the finest litharge be employed.”

To this I would add that the physician should examine each lot as made up, when this is possible, and he should in all cases decline to employ any ointment which has been on hand over a week. Although one of the most perfectly soothing and sedative of all ointments, unguentum diachylon is probably more apt to be ill-made or decomposed when dispensed, than any other, and it behooves the physician to look carefully after his prescription if he desires to avoid a possible catastrophe to his reputation.

out bits of soft linen cloth to fit the part to be covered, and then to spread the ointment upon these as thick as butter upon bread. When applied, they should be covered with oiled silk or waxed paper, for cleanliness sake.

An ointment similar to the diachylon ointment may be made by adding two or three parts of olive oil to four of diachylon plaster, the two substances being melted together, and stirred until cool. The proportion of oil used will, of course, vary with the weather. I do not often use this preparation, as it is apt to be tough and stringy. It is what the average apothecary dispenses, however, when *unguentum diachyli* is prescribed.

Among other soothing dressings may be mentioned, finally, cold cream, cucumber ointment, glycerole of starch, almond and olive oils and dilute glycerine. The olive oil must be pure and of good quality; the peanut oil usually supplied in its place is irritating, I think. I may also remark, that while glycerine in full strength disagrees with many skins, yet, where diluted with one to three parts of water, it will almost invariably be found to agree.

In papular eczema, the eruption being more discrete and scattered, the applications to be made must differ somewhat in form from those employed in vesicular eczema. Lotions are usually preferable, and in many cases, where the individual lesions are widely separated, these alone are admissible. Then, too, the inflammation is of a different character, and pursues, as a rule, a more chronic course. Soothing applications, therefore, do not often come into use, and we are more apt to have recourse to stimulant remedies, as the so-called anti-pruritics, and chiefly tar and its derivatives. Carbolic acid is the most important and generally useful of these remedies, and the one most apt to do good in papular eczema. The formulæ given just above will be suitable for many cases, only substituting water for the *lotio nigra*, and increasing the proportion of the carbolic acid when the skin will bear it.

A further account of the treatment to be employed in acute eczema will be found under the head of the treatment of eczema attacking particular regions of the body.

Chronic eczema. In some cases the treatment employed in the acute stage of eczema may also be made use of in the chronic condition of the affection; more frequently, however, other and more stimulating remedies will be found more serviceable.

Carbolic acid may be employed, either in the form of a lotion, as above, or as an ointment, of the strength of five to twenty grains to the ounce of oxide of zinc ointment, benzoated lard or vaseline. It may be relied upon as an anti-pruritic remedy when all others fail, and is a most valuable application in chronic eczema. Thymol, in the form of an ointment or lotion, in the strength of five to twenty grains to the ounce, is recommended by some writers. I have had very little experience with it. Tar and its preparations come largely into use in the treatment of chronic eczema. The tarry preparations must be handled with care, however, for, if used injudiciously, or in too great strength, they are apt to inflame the skin and retard the process of cure. They are most apt to be useful when the disease has completely reached the chronic stage, and when there is more or less infiltration. In using tar in the form of ointment, which is ordinarily the most convenient method of employing this remedy, its strength should at first rarely exceed one to two drachms to the ounce. It can be increased later, if the skin requires and will bear increased stimulation. The two forms of tar commonly employed are the *pix liquida* of the *Pharmacopœia* and the *oleum cadini*. Their effect upon the skin is apparently identical. A very convenient formula is the following:—

R.	Ol. Cadini.....	℥ ss	
	Ung. Aquæ Rosæ.....	℥j.	M.

On the scalp, fluid or semi-fluid preparations are usually more convenient than ointments; the following formula is recommended by Duhring:—

R.	Picis Liquidæ.....	ʒj
	Glycerinæ.....	fʒj
	Alcoholis.....	fʒvj
	Ol. Amygdalæ Amaræ.....	℥xv. M.

I often use the oil of cade mixed with three or four parts of alcohol or of oil of almonds, as an application in some forms of eczema of the scalp. These preparations are not to be smeared on the surface, or applied on cloths, as the soothing remedies. Much of their efficacy depends upon their proper and thorough application; they must be worked into the skin, in order to produce their full effect; patients and attendants should be especially instructed on this point. In thick old patches of chronic disease, the following preparation may be thoroughly rubbed in by means of a little mop of rag or candlewick tied to the end of a stick:—

R.	Picis Liquidæ,	
	Saponis Viridis,	
	Alcoholis.....	ʒij. M.

This preparation is known under the name of “tinctura saponis cum pice.” To produce a stronger impression, caustic potash may be used instead of the soap, in the proportion of five to fifteen grains to each ounce of the mixture. The following preparation, known as “liquor picis alkalinus,” was introduced to the notice of the profession by Dr. Bulkley:—

R.	Picis Liquidæ.....	ʒij
	Potassæ Causticæ.....	ʒj
	Aquæ.....	fʒv. M.

The potash is to be dissolved in the water, and gradually added to the tar with rubbing in a mortar. Of course, this

preparation is much too strong to be used undiluted, excepting in the rarest cases. As a lotion, it may be diluted with from eight or more parts of water at first, down to two parts after a little trial; care should be taken not to make the lotion too strong at first. The liquor picis alkalinus may also be combined with ointment, from one to two drachms to the ounce.

Soaps play an important part in the treatment of some forms of eczema. In ordinary cases, plain white castile soap is all that is required for cleansing purposes; and the less soap that is used beyond what is necessary for this purpose the better, as a general thing. Strong alkaline soaps are used in eczema, for their remedial effect, being particularly employed when some infiltration is to be removed, or when a stubborn and rebellious local patch of disease requires strong stimulation. Of these, the most generally useful is that known as Hebra's soap, green soap, or as it has been called in other parts of this work, "*sapo viridis*," a strongly alkaline potash soap. (See *Sapo viridis*.) It may be employed alone or in the form of an alcoholic solution, known as "*spiritus saponis kalinus*":—

R. Saponis Viridis..... ℥ ij
 Alcoholis..... f℥ j. M.
 Dissolve with the aid of heat, and filter.

It may be scented with lavender or other perfume if desired. This wash is very useful also for cleansing patches of eczema when covered with accumulated crusts and scales.

Under ordinary circumstances, and unless left in contact with the skin with a particular object in view, these stronger soaps should be washed off at once, and some oleaginous or fatty substance applied. Much mischief is sometimes done by allowing caustic soaps to remain in contact with the skin. Some years ago, when *sapo viridis* first came into vogue, I saw case after case in which this alkali had been applied

without knowledge or thought of its properties, as if it had been an ointment, that is, smeared on the inflamed skin and allowed to remain, to the great detriment of the patient.

Sapo viridis is particularly useful in extensive infiltrated *eczema rubrum* of the leg and other parts. It should be well rubbed into the affected patches, by means of a flannel rag, until considerable smarting, abundant serous discharge, and, perhaps, slight bleeding are induced. The soap is then to be completely washed off with pure hot water, the patch of disease lightly dried with a soft cloth, and some soothing ointment, by far most preferably *unguentum diachyli*, is applied, spread upon strips of cloth. This process is repeated once, or sometimes even twice, daily, and when it can be properly carried out is a rapid and efficient method of dealing with this form of *eczema*. In old, infiltrated patches of *eczema*, and in *eczema* of the palms particularly, solutions of caustic potash, ten to forty grains, or even a drachm, to the ounce, may be employed to advantage. The stronger of these must be used by the physician himself, and may not with safety be entrusted to the patient or to his attendants. The application should be made with a little mop tied to a stick, or occasionally with a bit of wood. The parts should be immediately bathed with cold water, or covered with cold-water compresses, and after a short time a soothing ointment may be applied. This procedure reduces infiltration, and stops itching very effectually, but it is a sharp weapon, and not to be used rashly. Pushed too far, there is danger of causing local sloughing, with subsequent scars. It should not be used more than once or twice a week under ordinary circumstances.

Other remedies for the chronic forms and stages of *eczema* may be mentioned, as follows: Mercurial preparations are particularly valuable, especially when the disease is confined

to a small area. When covering a considerable surface, mercurials should be used with care, or not at all, both on account of the fear of over-stimulation and for fear of absorption with resultant salivation. Calomel is the most generally useful of the mercurial preparations; it may be employed according to the following formula:—

R. Hydrarg. Chloridi Mite..... gr. x-xxx
 Ung. Zinci Oxidi,
 Ung. Petrolii.....āā..... ʒss. M.

The red oxide of mercury in ointment, of the strength of five to thirty grains to the ounce, is also often very useful; it constitutes a chief ingredient, I believe, in some of the best known quack “tetter” ointments. Somewhat milder is the ointment of ammoniated mercury, which may be employed of the same proportionate strength to advantage, in the pustular eczemas of children. Sulphur is also a highly useful application in some forms of eczema, particularly when there is a moist surface, or when its “cornifying” influence is required to regenerate the horny epithelium of the skin. It may be used in the form of ointment, of the strength of one to two drachms to the ounce of cold cream, in chronic eczema rubrum, occurring in patches; also, occasionally, in chronic pustular eczema, particularly about the hands. It should usually be used in a mild strength at first, and after a few days’ use should generally be substituted, for a time at least, by some other preparation. A combination of the officinal tar and sulphur ointments sometimes acts happily in old chronic eczemas with much itching and infiltration. Boric and salicylic acids have been highly recommended by authors of repute during the past few years. As to the former, I have used it in saturated solution in the eczema of infants with satisfaction; but have not had much experience in its employment elsewhere. It would seem more useful in the acuter forms of eczema. The following paste containing salicylic

acid is a very excellent preparation, but, like the boric acid solution, is perhaps better fitted for employment in the acute than in the chronic forms of eczema. It will come into use very conveniently in that class of cases where ointments are indicated, but where there is some idiosyncrasy which precludes their use:—

R.	Acidi Salicylici.....	gr. x
	Pulvis Zinci Oxidi,	
	Pulvis Amyli	āā..... ʒ ij
	Vaselini.....	ʒ iv. M.

This is an excellent ointment for use in hot weather. In winter it is a little stiff, and I think the proportion of starch might conveniently be reduced for cold weather.

A few years ago Mr. Squire, of London, brought forward the preparation known as glycerole of the subacetate of lead, as a remedy in chronic eczema. His formula is as follows: Acetate of lead, 5 parts; litharge, $3\frac{1}{3}$ parts; glycerine, 20 parts, by weight. Mix and expose to a temperature of 350° F., and filter through a hot water funnel. The clear viscid fluid resultant contains 129 grains of the subacetate of lead to the ounce. This is used as a stock, from which the preparations employed are made by dilution with simple glycerine. I have used this preparation quite extensively in the treatment of chronic eczema rubrum of the legs, particularly when the disease is extensive, of a dusky red hue, accompanied by weeping, œdema and a varicose condition of the veins. Also in eczema of the palms and soles. In eczema of the legs the glycerole stock may be used diluted with three parts of pure glycerine. Strips of linen soaked in this preparation are applied to the affected limb, and covered with wax paper and a bandage, the dressing being changed once or sometimes twice daily. This method of treatment may be employed to advantage in many cases when the treatment by means of *sapo viridis* and *unguentum diachyli* cannot be carried out.

In eczema of the palms and soles the following ointment gives good results :—

R.	Glycerol. Plumbi Subacetatis.....	f 3 ss	
	Glycerinæ.....	f 3 iss	
	Ung. Aquæ Rosæ.....	3 j	
	Ceræ Albæ.....	q. s.	M.

This is to be made into a tolerably firm ointment, and applied to the affected parts. It is better to precede its use with the application of solutions of caustic potash, and it should be spread thickly upon narrow strips of linen, and placed in close apposition to the affected parts, being covered with wax paper, to prevent soiling.

For obstinate, circumscribed patches of eczema, blistering with cantharidal collodium will sometimes be found beneficial. With the same object, strong solutions of carbolic acid in alcohol, tincture of iodine, and solutions of nitrate of silver, or even the solid stick, may be employed. Vulcanized india rubber has been used extensively in the treatment of eczema, and may be employed with advantage, both as a protective against atmospheric influences, as a preparative for other applications, and as a direct therapeutic agent. In the form of Martin's solid rubber bandage, it is of great use in varicose eczema rubrum of the leg. It is apt to give rise to great itching, and even pain, when applied continuously upon the lower limbs, and for this reason it is well to have the bandage applied in the morning on rising, and to be worn during the day only. On retiring at night, the bandage is to be removed, and the limb plunged quickly into water as hot as can be borne. Removed from this in a few moments, it is wiped gently dry and the surface dusted with starch powder, and loosely covered with linen cloth for the night. If the itching is very severe, a carbolic acid lotion may be substituted for the powder. Under this treatment rapid improvement is usually observed; and sometimes no further

treatment is required. Rubber cloth in sheets, rubber masks and finger-stalls, are also often employed in the various forms of eczema with advantage.

Having now spoken of the acute and chronic forms of eczema in general, it will be advantageous to next consider this disease as it is met with in different localities.

Universal eczema is very rare; when it does occur it is usually erythematous or squamous. Its history in these cases will serve to bring out one or another of the points mentioned in discussing the general diagnosis of the disease, and so lead to its identification. Eczema of the *scalp* is usually erythematous, vesicular or pustular. The first variety rapidly runs into the squamous, the scalp being more or less covered with red, scaly patches, which are very itchy. The pustular variety is common among children. The pustules commonly come out in great numbers about the hair follicles. They soon rupture, and the liquid, oozing over the skin, forms yellowish-green crusts, sometimes amounting to thick masses. The hair becomes matted and caked; the scalp, if not cleansed, gives out a very offensive odor; and the disease, unless checked by proper treatment, may last from a few weeks even to years. The itching is usually not so decided in this as in other forms of eczema. Sympathetic enlargement of the lymphatic glands about the back of the neck and behind the ears is common in this form of eczema, and in the case of children often gives rise to great anxiety on the part of parents. The glands never suppurate, and the patient's friends may be assured, with confidence, that, as the irritation and inflammation about the scalp subside, the glandular engorgement will spontaneously disappear. Small abscesses often complicate the eczema of the scalp in unhealthy children. Pediculi also are very frequently present, and the scalp should be examined for the insects or their nits in all cases of pustular eczema. A patch of pustular eczema occur-

ring in the occipital region, especially in neglected and ill-nourished children, almost invariably points to the presence of pediculi as a cause. When present, they should at once be removed by the means described under *Pediculosis capitis*.

Eczema of the scalp may be confounded with psoriasis, seborrhœa, favus, syphilis and tinea tonsurans. From psoriasis of the head eczema may be distinguished by the symptoms mentioned in the general diagnosis of the disease. Pityriasis sometimes resembles eczema capitis very closely, but the pearly color of the scales and the not unfrequent combination of more or less seborrhœa with the pityriasis, making the scales greasy, as also its diffusion, and the history of the case, are important elements in distinguishing eczema from this disease. Other points have been touched upon earlier. Pustular eczema alone is likely to be mistaken for favus, but the mustard or canary color of the favus crusts, their commonly cup-shaped outline and the dry, pulverulent consistence of the masses of fungus, together with the microscopic appearance, will be sufficient to distinguish it from eczema. As before mentioned, certain syphilitic diseases of the scalp may be mistaken for eczema. The history of the case, with the characteristic symptoms above given, are ordinarily sufficiently distinctive. Erythematous or squamous eczema may sometimes be mistaken for tinea tonsurans. The patches of eczema, however, are not attended with loss of hair. In ringworm of the scalp the hairs are broken off uniformly about an eighth or a quarter of an inch beyond the scalp. The hair has a nibbled appearance. The patches in ringworm are apt to be roundish in outline. In eczema they are irregular. The color of the scalp is of a leaden hue; while in eczema it is reddish, and has more the appearance of inflammation. The itching in eczema is marked. In tinea tonsurans it is slight. A history of contagion is frequently found in connection with tinea tonsurans.

The treatment of eczema capitis will, of course, depend upon the variety and stage of the affection in each case. In pustular eczema the crusts must first be removed by means of hot water and soap, preceded, if necessary, by thorough saturation with olive or almond oil, to soften and loosen the crusts. Sometimes the scalp must be well saturated with oil and covered with a cap over night; and perhaps the process must be repeated; at all events, the crusts must be removed before any applications are made. Occasionally the oil alone appears to exert a curative influence, but usually more decided treatment is required. The hair in children, boys and men may be cut short, especially when lice are present. In women this sacrifice is not necessary, and should not be permitted. Now and then, however, we meet cases where women are suffering with severe and neglected eczema due to pediculosis of long standing, and where the hairs are so matted and glued together that we are obliged to have recourse to the scissors.

As to medicinal applications: in inflammatory cases black wash or one of the carbolic acid lotions may be applied with a sponge or cloth for ten or fifteen minutes at a time, morning and evening, and these may be followed each time by an oily preparation. If ointments can be used, the following are of value:—

R. Bismuthi Subnitrat..... ℥j
 Unguent. Petrolii..... ℥j. M.

Or this,

R. Hydrarg. Ammoniat..... gr. x-xx
 Unguent. Petrolii..... ℥j. M.

The following is somewhat more stimulating. It appears to have a drying effect when there is discharge:—

R. Hydrarg. Chlor. Mite..... gr. xx-xl
 Unguent. Petrolii..... ℥j. M.

A small portion only should be applied at once, but this should be rubbed in thoroughly. When a stimulant effect is

desired, an ointment of the red oxide of mercury, ten to twenty grains to the ounce, may be employed. The ammoniated mercury ointment is particularly useful, in cases where the eczema is due to the presence of lice.

When still stronger stimulation is required, especially when exudation has ceased, and the scalp is red and scaly, one of the following ointments may be employed:—

R, Ung. Hydrarg. Nitrat..... ʒj-iv
 Ung. Petrolii..... ʒ iv. M.

Or,

R. Picis Liquidæ..... ʒj
 Vaselini..... ʒj. M.

As these cannot be applied when the hair is long, a fluid preparation must be employed:—

R. Ol. Cadini..... fʒss ad fʒj
 Ol. Amygdalæ.....ad..... fʒj. M.

Alcohol may be substituted for the oil when the hair is quite thick. In some cases, when there is scaly eczema of the scalp with some tendency to greasiness, and the occurrence of seborrhœa, the following ointment acts happily:—

R. Acidi Tannici..... ʒj
 Ung. Petrolii..... ʒj. M.

When the hair is long, glycerine and alcohol in equal proportions, may be substituted for the vaseline.

Eczema of the *face* is more apt to be met with in children, (see *Eczema infantile*), but is also found in adults, on the cheeks and elsewhere. The form of eczema found in adults is usually the erythematous, on the cheeks, nose, forehead, and sometimes extending around to the ears and down the neck. The skin becomes bright or dusky red, with intense burning and some itching. It becomes thickened, infiltrated and stiff, with some scaliness. This form of eczema is more apt to occur in winter, and among persons exposed to cold

and wind. In addition to such general means of treatment as are called for by the patient's condition, active local measures should be used. Lead water lotions are valuable in the acute stage, and also black wash. Black wash should be sopped on the skin, or laid on by means of rags saturated with it, and renewed hourly. This may be followed by an ointment, especially if the patient must move about and cannot keep the wash in contact. The following is a very good preparation :—

R. Pulv. Zinci Oxidi.....	ʒ j-ʒ ij	
Sevi Purificati.....	ʒ ij-ʒ ij	
Adipis.....	ʒ iv-ʒ ij	
Pulv. Ulmi Fulvæ.....	q. s.	M.

Or oxide of zinc ointment with equal part of vaseline may be employed.

In order to protect the skin from cold air, which is poisonous when the skin is in this condition, I am accustomed to recommend the use of the following paste :—

R. Tragacanth,		
Glycerinæ.....aa.....	ʒ iv	
Boracis	ʒ ss	
Aquæ Destillat.....	q. s.	M.

With these materials, a thin, adherent, quickly drying paste may be made, with which the skin of the face may be painted just before going out of doors. This is almost or quite invisible, and yet acts as a perfect protective. On returning home it may be washed off readily with a little warm water, and then the lotions and ointments may be applied. This is worth remembering, because not every one can stay at home, day after day, and keep applications constantly to his face, and it is well to be prepared with some such alternative, which if it does little good yet prevents much harm to the skin.

As soon as possible the soothing applications should be

changed for lotions and ointments containing tar and carbolic acid. The carbolic acid wash may be tried even when the eruption is at its height, being more apt to be useful if itching, rather than burning, should be the prominent symptom. The formula is given a few pages back. Water may be substituted for the *lotio nigra*.

The proportion of carbolic acid may be increased or diminished as the case requires. There is a solution of coal tar which is known as "*liquor carbonis detergens*," and which is miscible with water, which is an excellent lotion for use in this form of eczema; it should be employed in the proportion of one part to eight of water or stronger. When ointments are borne, the following is useful in very many cases. I almost always try it before using other preparations:—

R. Picis Liquidæ..... ʒss-ʒij
Ung. Aquæ Rosæ..... ʒj. M.

Now and then fissures and cracks form in the infiltrated skin, especially about the *alæ nasi*. The following pigment is very efficient in healing these, and may often be used as a protective over other parts of the face, when there is no objection to the discoloration:—

R. Ol. Cadini..... ʒj
Liq. Gutta Percha, see Collodii. ʒj. M.

Let a brush be put in the cork, and let the patient paint the skin over several times a day. This pigment has the advantage over ointments, that it cannot be rubbed off.

Eczema of the *lips* is ordinarily accompanied by swelling, redness, heat, infiltration, slight scaliness and fissures. The muco-cutaneous surface or the skin outside may be attacked, and the symptoms and treatment differ according to the seat of the eczema. Eczema of the lips is to be distinguished from herpes and syphilis. Herpes runs a distinct, short

course, and is composed of discrete, well-marked vesicles or groups of vesicles. Eczema is more obstinate, and covers a larger surface. Syphilis occurring about the mouth usually either assumes the form of circumscribed, more or less irregular erosions on the inside of the lip, or else is seen localized in the angles of the mouth, forming a more or less deep fissure and secreting a puriform fluid. Eczema of the lips, especially when occurring on the muco-cutaneous surface, is difficult and painful to treat. Solution of potassa, twenty grains to the ounce, is of use when there is infiltration. The muco-cutaneous surface should be carefully dried before it is applied, and afterwards, to prevent running. Ordinarily milder preparations are best. The following is a useful combination :—

R. Acidi Phosphorici, dil.,
Glycerinæ,
Syrupi.....āā..... f ʒss. M.
SIG.—Apply to parts three times daily.

The same formula, with the addition of enough water to make six ounces, may be given simultaneously in teaspoonful doses thrice daily. When a dry, wrinkled, scaly condition exists, G. H. Fox suggests the use of an ointment containing five grains of thymol to the ounce of cold cream.

When the outer edge of the lip is affected the following ointment is useful :—

R. Zinci Oxidi,
Mellitis.....āā..... ʒ ij
Olei Amygdalæ..... ʒ vj
Ceræ Flavæ..... ʒ ij. M.

In winter a condition analogous to eczema produces annoying fissures of the lip, which may be treated by moistening the fissure and applying a pointed stick of nitrate of silver. Afterwards the compound tincture of benzoin may be painted on as a protective. Another procedure in chronic

cases is to forcibly tear open the crack a short distance and then rub in, by means of a bit of stick, a minute quantity of strong red oxide of mercury ointment (forty to sixty grains to the drachm).

There is a form of eczema occurring on the upper lip, about the opening of the nostril. This will be considered under eczema of the beard.

Eczema of the *eyelids* often occurs in scrofulous and badly-nourished children, and less frequently, among adults also. The follicles of the eyelashes are involved, small pustules forming, which dry into crusts, gluing the edges of the lids together. These are usually more or less red and swollen. Conjunctivitis may or may not be present. The treatment varies, according to the severity of the case. Mild cases require no more than the application of a weak nitrate of mercury ointment, made of the officinal ointment diluted with three to six parts of cold cream, or an ointment of ten grains of red oxide of mercury to the ounce of cold cream. In severe cases the eyelashes should be extracted, the edges of the lids carefully dried and then touched with a camel's hair pencil moistened with a drop of a ten-grain-to-the-ounce solution of caustic potassa. This application is to be wiped away immediately and the effect neutralized by the application of cold water. The operation may be repeated every day until the infiltration, exudation and itching subside, after which one of the stimulating ointments just mentioned may be used to complete the cure.

Eczema of the *beard* is sometimes excessively stubborn and annoying. Pustules, usually seated about the hairs, form with great rapidity and persistence, and are followed by yellowish or greenish crusts, often matting the hairs together. Usually the affection is confined to a limited locality, as the corner of the upper lip, near the commissure, or just at the opening of the nostrils; but occasionally the whole beard

may be involved, and the disease may extend to other parts of the face. In this respect the affection differs from sycosis (see *Sycosis*), which is always limited to the hair follicles. The latter is also a deep process, involving the follicles themselves, while eczema barbæ is essentially superficial, occupying the surface of the skin alone and taking in the hair follicles only incidentally. Papules and tubercles, not uncommon in sycosis, are absent in eczema barbæ. The two affections do, however, often resemble one another very closely.

Tinea sycosis (see *Tinea sycosis*) is sometimes mistaken for eczema barbæ; it is important to distinguish between the two diseases. Crusts are generally abundant in eczema; in *tinea sycosis* they are generally (though not always) scanty. When the crusts are removed the eczematous surface is smooth, while in *tinea sycosis* it is rough, uneven, tubercular and lumpy—a very important point. The hairs in eczema are usually firm in their follicles, and the attempt to remove them causes pain, even when there is a good deal of suppuration about the root. In *tinea sycosis*, on the other hand, the hairs come away without the least pain or difficulty; they are often crooked, but are usually quite smooth and dry, while the hairs of eczema are surrounded by the glutinous root sheath. Above all, the hairs in *tinea sycosis* almost invariably contain the characteristic fungus (see *Tinea sycosis*); besides which, the source of contagion in this highly contagious disease can frequently be traced out. Finally, patches of characteristic ringworm not unfrequently can be seen on the neighboring skin.

The treatment of eczema of the beard should be prompt and energetic. The crusts must first be removed with oil or poultices followed by soap and warm water, and then the beard must be carefully shaved. This is a painful operation when first performed, and patients often rebel against it. It is well to be firm, however, and it is unsafe to take the responsibility of a case, unless the patient complies with these

directions. After the first time, shaving is much less painful, and patients do not object. Ointments and applications cannot be brought into intimate contact with the surface when there are hairs growing upon it. In the acute stage, the treatment by *sapo viridis* and *unguentum diachyli*, as described under the general treatment of *eczema*, is best. Later, a weak sulphur ointment, of one drachm to the ounce, or the sulphur and tragacanth wash (see *Acne*), may be employed.

Eczema of the *ears* may occur in any form, and may involve either the outside or the meatus. In the acute forms and stages the ears are red and swollen, and they burn and itch severely. The disease, when it involves the meatus, may cause temporary deafness from occlusion by large and abundant epidermic flakes and scales. Ointments, as a rule, are most useful in *eczema* of the ears, though in the acute stages, black wash, or the other washes, may first be employed, as in the general treatment of acute *eczema*. When there is a deep crack behind the ear, of long standing, *sapo viridis* may be briskly rubbed in, followed by an ointment containing tar or calomel, a drachm to the ounce. This is a good combination:—

R. *Picis Liquidæ*..... ʒj
 Ung. Zinci Oxidi..... ʒj. M.

Or calomel may be added to this formula. When the meatus is involved, ointments, etc., being used, the opening may become gradually clogged with debris, and deafness, often quite alarming to the patient, may result. In these cases the meatus is to be carefully syringed out with warm water, containing a little borax, sodium carbonate, or common salt, in order to remove all the wax, epithelium, grease, etc. Oil of sweet almonds may be dropped into the meatus first, to soften the mass. Care must be taken in these manipulations, and especially in making applications, not to injure

the membrana tympani. The crusts being removed, and the meatus gently dried, the affected parts may be touched with a solution of nitrate of silver, two to three grains to the ounce, and dry charpie applied, or if there is much oozing, cold cream in small quantity. If the skin is infiltrated, a solution of potassa, ten grains to the ounce, may be applied, by means of a camel's-hair pencil carefully stripped before introduction, so as not to leave a drop which may run down to the tympanic membrane. These applications may be made every day or two, and as the acute symptoms pass off, an ointment of tannic acid, one drachm to the ounce, may be substituted for the cold cream. Eczema occurring about the ears, and particularly in the meatus, is apt to be stubborn.

Eczema of the *genitals* is one of the most painful and distressing forms of the disease. In the male, the penis or the scrotum alone may be involved, or both together. The latter is more commonly the seat of the disease, and the tissues of the skin here become greatly thickened, swollen and infiltrated. Moisture, crusts, and painful fissures along the folds of the skin are often present. Itching is a severe and prominent symptom, and the disease is apt to be very chronic. In the female the labia and even the vagina may be invaded. The affection here is even more distressing than in the male. Itching is violent and causes extreme misery. The diagnosis is not difficult. Pruritus alone is apt to be mistaken for eczema of the genitals, and here the absence of visible primary lesions will decide the character of the case. The itching comes first in pruritus, and then the skin is torn and bleeding, from the scratching.

Sometimes eczema of the genitals yields quickly to treatment; this is when it is recent and superficial; chronic eczema with thickening and infiltration is often obstinate to an extreme degree.

In the acute and superficial form, simple or medicated

warm baths are often grateful and give much relief. The following is a fair sample of the method of making up these baths:—

R.	Potassii Carbonat.....	℥iv	
	Sodii Carbonat.....	℥ij	
	Pulv. Boracis.....	℥ij.	M.

Dissolve in a quart or so of water; add four to six ounces of dry starch, placed beneath the water in the hand, which is then opened and beaten through. Six to eight ounces of glycerine may then be added if thought desirable, and the whole mixed in with about thirty gallons of hot water in a long bath tub. The patient remains in the bath for fifteen to twenty minutes. On coming out the parts are to be carefully dried without rubbing, and then at once thickly dusted with powdered subnitrate of bismuth, or wrapped up in an ointment composed of one part of cod-liver oil to two parts of suet.

When baths cannot be taken, or even when these are employed, it will often be found advantageous to use lotions of lead water or black wash, or the fluid extract of *grindelia robusta*, two drachms in a pint of water. If the patient is obliged to go about his work or business, it will be well, if he be a man, that the part be wrapped or supported in fine linen wrappings, to protect it. One of the various dusting powders, as nitrate of bismuth, lycopodium, magnesia, etc., may be dusted on, or if powders are found too drying, a little vaseline may be smeared over the surface. In both men and women it is important to keep adjacent parts separate from one another, as the heat and moisture engendered infallibly make the disease worse.

Where there is infiltration the treatment must be different. Whatever applications are made, however, will do more good if the parts are first bathed with water as hot as can be borne. The *sapo viridis* and *unguentum diachyli* treatment, described above, under the head of general treatment, is a most excel-

lent method for use in chronic and indurated eczema of the genitals, when it can be had. When there is considerable itching carbolic acid wash—acid carbolic, ℥iij; glycerine, ℥j; aquæ, Oj—is of advantage. It is particularly useful in eczema of the female genitals, and its application, which may be practiced at intervals of a few hours, should be preceded, when possible, by bathing with hot water. In eczema of the scrotum, when there is much itching, the following application may be employed:—

℞. Argenti Nitrat..... gr. x-xxx
Spiritus Æth. Nit..... f℥j. M.

This is to be painted on the parts, and will serve to protect them; if found too stiff, some ointment may be applied as soon as the pigment is dry. Stimulating ointments, mercurial, tarry, etc., as given above, may be employed from time to time, as required, and one thing should be tried after another until relief is gained; for in this form of eczema, more than in any other, perhaps, the treatment must, of necessity, be largely empirical and tentative.

Eczema of the *anus* is not very common—pruritus of this region being usually mistaken for this disease—but when it occurs, may cause much infiltration and fissuring, with not unfrequently involvement of the neighboring parts. It usually assumes the erythematous form, and when fissure results great pain is experienced on defecation. On account of this, constipation from over-retention of the fæces is commonly present, with the effect of heightening the discomfort and pain caused by the passage of the stools. Itching and burning sensations, worse at night on going to bed, and in severe cases pain on defecation—these are the chief symptoms of eczema ani. The treatment is, in general, the same as that of infiltrated eczemas in other localities. Tar ointments in various proportions are very useful. The following formula gives the tar in the least offensive form possible—

R. Picis Liquidæ	℥j
Medullæ Bovis.....	℥vj
Ceræ Albæ	℥j
Ol. Rosæ.....	℥v. M.

Almond oil containing twenty per cent. carbolic acid forms a cleanly and not disagreeable application. It may be rubbed in with the finger every night on retiring. Even when the muco-cutaneous surface is abraded and fissured, this oil gives relief, while many applications pain severely. When there are deep fissures, these should be split open and touched with the nitrate of silver stick, the tar ointment being subsequently applied. The parts should be kept scrupulously clean, and the patient should be exhorted not to scrape and dig at the skin, but to fly to his ointment or oil when the attack comes on, and especially to keep these close at hand when undressing for the night. If there is any tendency to congestion and moisture about the nates and perineum, these should be powdered with starch or astringent powders. Aperients, by permitting the passage of the fæces in a softened condition, and also possibly by relieving the circulation in the hemorrhoidal veins, may often be of service.

Eczema intertrigo resembles erythema intertrigo (see *Erythema intertrigo*), but shows the characteristics of eczema. The parts should be dusted frequently with astringent powders, kept from rubbing, if possible, by the interposition of lint or cloth, and rest, when possible, should be enjoined. Sometimes astringent lotions are useful.

Eczema of the *breasts* may occur about the nipple or on the lower edge of the breasts. The former variety is often brought about or kept up by nursing. The diagnosis, especially from syphilis and from *Paget's Disease* (see *Paget's Disease of the Nipple*), which is very important, is to be made by exclusion. Eczema occurring in this locality shows the infiltration, redness, exudation, burning, itching, etc., char-

acteristic of the affection. The *sapo viridis* and *unguentum diachyli* treatment, or that by solutions of caustic potassa, is the best when there is much infiltration. The treatment in every case should be decided and vigorous. When fissures of the nipple occur in nursing women, leaden shields may be used and the cracks in the nipple moistened, touched with nitrate of silver stick (an excessively painful operation for the moment), and painted with compound tincture of benzoin. By this means cracks in the nipple can often be healed up while the child is nursing. When eczema occurs about the lower edge of the breast it generally takes on the form of *eczema rubrum* or *eczema intertrigo*, and is in part due to a pendulous condition of the *mammæ*. The usual treatment of lotions, black wash, astringent powders, and the interposition of lint or absorbent cotton will work a cure.

Eczema of the *umbilicus* is usually moist and fissured. A disagreeable odor generally accompanies the affection in this locality, and there are scales and crusts. The disease is apt to be mistaken for syphilis if it occurs only in this locality, but in syphilis ulceration usually takes place, and the smell is more than disagreeable; it is positively offensive.

Eczema of the *legs* is a very common form of the disease, especially among old people. The erythematous and vesicular varieties are commonest at the beginning, but these soon change to *eczema rubrum* or weeping eczema. The affection occurs in one or more patches of various size, the whole leg being not unfrequently involved. When it comes under notice it has generally lasted some time; the skin of the leg is smooth, shiny, dusky red or violaceous and unbroken; or it may be moist and weeping, or covered in part or wholly with scales and crusts. There is always a good deal of thickening and infiltration, with burning and itching to an extreme degree. Varicose veins often accompany this form of eczema, and varicose ulcers are not uncommon. *Eczema rubrum*

sometimes occurs in elephantiasis of the legs; here it is secondary to the other affection. The diagnosis of eczema of the leg is not difficult. Ulcers, when present, are to be distinguished from syphilitic ulcers. The treatment of eczema of the leg must vary with the nature of the case. In moist, weeping eczema the *sapo viridis* and *unguentum diachyli* is the best treatment when it can be carried out. Next to this is the treatment by means of glycerole of the subacetate of lead. Both forms of treatment have already been described. Of late I have used, with great satisfaction, a paste suggested by Unna. It is composed as follows:—

℞. Kaolin.,
 Ol. Lini. (seu Glycerinæ)..āā.. ℥vj
 Pulv. Zinci Oxidi,
 Liq. Plumbi Subacetat...āā... ℥ss. M.

This forms a thick, creamy liquid, which dries with tolerable rapidity on exposure to the air. It is best preserved in a bottle with a large brush in the cork. This prevents evaporation and permits the ready application of the remedy. A thick coating is painted on the skin and allowed to dry, which usually occurs in a few moments, or if it does not dry quickly enough a little powdered kaolin or starch may be dusted over the surface by means of a whisp of cotton. A bandage is then applied firmly from the toe to the knee, and the dressing allowed to remain in place for twenty-four hours. At the end of that time, the bandage being removed, the dried paste can be readily detached. When it sticks closely to the skin it is better not to tear it off, but to paint over the whole limb. This process is repeated daily, the area covered diminishing with the healing up of the disease, until, finally, pigmentation occurs. When enlarged or varicose veins occur in connection with eczema of the leg, particular pains must be taken to support the vessels and to give tone to the circulation. The patient should sit or lie with the limb in an elevated position,

and should never permit it to hang down. Walking exercise may sometimes be taken in moderation with benefit, if the limb has been supported by an elastic stocking, or by one of Martin's rubber bandages. Bandages of one kind or another should always be employed in eczema of the leg, both to support the dressing properly, and, as has been said, to give tone to the vessels. Too much stress cannot be laid on the importance of attending to the condition of the circulation in eczema of the leg. The rubber bandage is particularly useful when there are ulcers present. It should be applied directly to the limb, care being taken to exercise firm and even, but not too severe pressure. At night the bandage should be removed and dropped into a bucket of cold water, from which it can be removed in the morning and dried previous to re-application. The leg should be dusted with starch, or dried with a towel; or it may be bathed with hot water or carbolic acid, if there is much itching, and then is to be wrapped up loosely in a muslin bandage, or cloth, for the night.

Eczema of the *hands* may attack either the back or the palm. The appearance and course of the disease is so different, however, in one case or the other, that they must be considered separately. Eczema vesiculosum is the variety most common on the backs of the hands, and on the backs and sides of the fingers. Sometimes the pustular variety is found, and occasionally fissured eczema about the knuckles. The vesicular form of eczema is not unlike that found in other localities, excepting that large blebs occasionally form. It may be acute or chronic, and in some cases the nails are also involved in the disease. It is apt to occur as a result of exposure to acids, alkalies, brickdust, etc. The diagnosis between eczema and scabies of the backs and sides of the fingers and hands is sometimes very difficult. In scabies the peculiar burrow of the itch insect, a short, irregularly curved,

beaded, black line, a quarter of an inch in length, is often present, and the vesicles are few in number and scattered. In eczema, on the other hand, the vesicles are numerous and closely grouped. In scabies the vesicles are firm, and usually remain unruptured until they are opened by mechanical means. In eczema the vesicles usually rupture spontaneously, at an early period. The vesicles of scabies commonly exhibit through their summits, a fine, dark, irregular line, made up of points, being the original burrow in the epidermis which has been raised by the formation of the vesicle. This is, of course, wanting in eczema. The occurrence of scabies elsewhere over the body, will also assist in the diagnosis. Vesicular eczema of the backs of the hands may also be confounded with the rare disease known as dysidrosis or pompholyx. (See *Dysidrosis*). Eczema of the backs of the hands, and particularly eczema of the fingers, is apt to be very intractable, sometimes recurring every year or oftener, at regular intervals. In the acuter forms of vesicular eczema of the backs of the hands, lotions, as black wash, and particularly a lotion of two to four grains of the sulphate of zinc to the ounce of water, are useful in the more chronic form of the disease. Stimulating ointments commonly answer the best purpose in the chronic form. When the case is chronic and not very extensive, the vesicles may be ruptured by an application of solution of caustic potassa, twenty to forty grains to the ounce, applied with a pointed stick, or brushed quickly over the surface and washed off. The application is to be followed by a soothing ointment. India rubber finger-stalls are sometimes employed with success. Eczema of the backs of the feet differs in no essential from eczema of the backs of the hands. It is less frequent, however, and when it occurs is apt to be less extensive and less rebellious to treatment.

Eczema of the *palms* and *soles* presents some peculiar

features. Owing to the thickness of the epidermis in these localities, the appearance of the affection is somewhat marked. Infiltration, thickening, more or less callosity, dryness and fissuring mark the disease. It is very chronic and intractable. Sometimes deep and painful fissures occur, and when these are found upon the feet locomotion is rendered almost or quite impossible. The diagnosis of eczema of the palms and soles is often difficult. It is apt to be confounded with psoriasis and syphilis. From psoriasis eczema differs in showing, at times, moist and bloody fissures, while those of psoriasis are usually dry, and show little disposition to bleed. The patches of eczema are usually larger than those of psoriasis, and their edges pass gradually into the healthy skin. The patches of psoriasis are smaller, darker, covered with more abundant and paler or white scales. But the best point in diagnosis is the appearance of the disease on other parts of the body. When the palms and soles alone are affected, it is sometimes hardly possible to distinguish eczema from psoriasis. The latter, however, is exceedingly rare, so that the chances are one hundred to one in favor of any given case turning out to be eczema. The diagnosis between eczema and syphilis of the palms and soles is not usually so difficult, although sometimes, when the affection is not found elsewhere, one may be puzzled to come to a decision. The infiltration of syphilis is of a firmer nature than that of eczema; it also extends more deeply into the skin. The patches are smaller and more circumscribed, and sharply defined upon the edge, and they have a tendency to spread upon the periphery and to assume the circinate form. Eczema is usually much more uniformly diffused; it is apt to be of a light color, while syphilis is darker, and sometimes ham-colored. It is also apt at times to itch, while syphilis does not itch. The history, and especially the occurrence of concomitant lesions elsewhere, will often aid the diagnosis.

The treatment of eczema upon the palms and soles must be of the most active and vigorous character, if relief is to be expected. The first point is to get rid of the thick epidermis. This may be accomplished by covering the palm with rags, spread with *sapo viridis* or wet with a five to ten grain solution of caustic potassa, and covered with rubber cloth. These are to be kept on day and night, until the epidermis is softened, macerated, and reduced to something like its normal thickness. Then stimulating ointments, containing mercury and tar, may be employed. When the physician himself can conduct the treatment of the case, the following plan may be employed: Let the affected palm or sole be soaked for some minutes in water as hot as may conveniently be borne; and then, after the superfluous moisture has been hastily removed, let a twenty to forty per cent. solution of caustic potassa be firmly rubbed into the affected skin at all points, by means of a small mop, made of old-fashioned lamp-wick tied to a short stick. If this produces an uncomfortable heat, the surface may be washed with pure, cool water; otherwise, the following ointment is to be applied directly:—

R.	Hydrarg. Ammoniat.....	℥ j
	Adipis.....	℥ ss
	Sevi Benzoinati.....	℥ ij-℥ j
	Ol. Amygdalæ Dulcis.....	℥ x
	Ung. Petrolii.....ad.....	℥ vj. M.

It should be spread over the surface, and also laid thickly upon rags and applied; waxed paper being wrapped about each finger and placed over the palm, both for cleanliness sake and to aid the effect of the ointment. This is to be repeated daily until cracks heal up, the skin becomes thin and supple, and begins to assume a healthier appearance. Then the potassa applications are suspended, and a weak tar ointment—a drachm to the ounce—is rubbed in daily, to complete the cure.

Though the treatment just described is more particularly applicable to the palms, yet it may also be employed upon the soles. However, a better treatment for that form of eczema affecting the thicker skin of the soles is the glycerole of lead treatment, described above.

Eczema, when it occurs upon the nails, shows them deprived of polish, rough, uneven, and often punctate or honeycombed. The nail becomes depressed, particularly about the root, at which point its proper nutrition is arrested. It may gradually recover its normal condition, or it may be cast off and replaced by a new nail. With regard to treatment, tar ointment, one drachm to the ounce, applied about the root, with the internal administration of arsenic, promise the best results. Treatment, however, not unfrequently seems to be entirely without effect.

Eczema in Infants. Infants are liable to eczema from the first weeks of extra-uterine life, the chief differences between the disease as shown in these cases and as it manifests itself in later life being, on the one hand, the restricted causes which may give rise to the disease, and on the other hand, the different appearance of the eruption, dependent upon the peculiar structure of the skin in early life. Eczema in infants and in young children is due either to digestive disturbances, to teething, or to that inherited weakness of constitution and poor nutrition generally attributed to the scrofulous habit. Bottle-fed infants are most apt to suffer from indigestion, and these are also most liable to the eruption of eczema. While too much stress must not be laid upon the irritation of teething as giving rise to eczematous eruptions, yet when the tendency to eczema exists each tooth, as it comes out, will often be accompanied by an eczematous rash, which fades away as the tooth develops. It will be found, on observation, that the children of parents who suffer from a tendency to phthisis, or who present the symptoms commonly associated

with the idea of scrofula, are most apt to be attacked with eczema, even when fed on the breast and presenting no signs of indigestion. When, as among the lower classes, improper nourishment and bad hygienic surroundings are added, the disease sometimes takes on a quite severe form.

The diagnosis of infantile eczema is usually not difficult. It commonly occurs about the buttocks, genitalia and folds of the neck, in the form of *E. erythematosum* or *E. intertrigo*. In the former locality it may be mistaken for syphilis, but the absence of deep infiltration, and, above all, the absence of characteristic syphilitic lesions, whether of the palms and soles or of the body generally, will usually assist the diagnosis. The vesicular and pustular form is that commonly met with in infants, upon the cheeks, face and head generally. It sometimes runs on to *E. rubrum*, with very abundant discharge of serum. Occasionally shallow ulcers with crusts form, and in this variety it is at times difficult to say whether we have eczema or syphilis. Especially is this the case when the child is poorly nourished and emaciated. But in syphilis we are apt to have "snuffles," cracks in the commissure of the lips and lesions about the anus; also, some of the lesions are apt to be infiltrated and to show deeper ulceration. Eczema, moreover, tends to itch to a marked degree, and this alone will commonly distinguish it. Papular eczema is more apt to occur in older children; it may very readily be mistaken for scabies, but the points given under that head (see *Scabies*) will serve to distinguish between the two affections.

The treatment of eczema in infants must depend, to some extent, upon the cause. When indigestion seems to be at the bottom of it, the food must be changed and regulated. It is astonishing what blunders are made in the feeding of infants. The physician who desires to treat such cases of infantile eczema as come under his care with satisfaction and success, must study in each case to obtain suitable food and see that

it is properly administered. Constipation in infants is a frequent cause of eczema, and should be combated. If habitual, the food should be changed with the view to improve this condition, while for occasional use the following powder may be administered:—

R. Hydrarg. Chlor. Mite..... gr. xij
 Pulv. Rhei..... gr. xvij
 Magnesiæ Calcinat..... ʒss. M.
 Div in chart. No. vj.
 SIG.—One every morning.

This is the dose for an infant of eight to ten months; the quantity, of course, should be regulated according to the general condition of the child, as well as its age. It should not be given for more than a few days successively, and purging should be avoided. I find this a very useful powder in eczema of an acute or semi-acute character in constipated infants. If there is vomiting and dyspepsia, then lactopeptine, or pepsin and bismuth, may be administered.

When general debility exists, particularly when there is a scrofulous taint, syrup of the iodide of iron, in doses of five to ten drops, even in infants of a year old, may be administered. Sometimes, also, cod-liver oil, internally or by inunction, may be employed.

The external treatment of eczema in infants will depend upon the form of the disease present. When this is erythematous, and situated about the buttocks, genitalia, and folds of the neck, astringent dusting powders, as kaolin, oxide of zinc, and subnitrate of bismuth, may be employed; while parts that are in apposition should be separated by a thin whisp of absorbent cotton. Starch powders often do more harm than good in these cases, because they soon get moist, caked, sour and irritating. Black wash and dilute lead water may be used in some cases. Ointments are generally not so convenient in this form of eczema. In vesicular and vesi-

culo-pustular eczema, and especially in eczema rubrum about the face and head, ointments are more useful. Scales and crusts should be cleaned away as far as possible, and then the milder and astringent ointments may be used first, and later those of a more stimulating quality. The following are convenient formulæ:—

R.	Pulvis Zinci Carbonat.....	℥j	
	Ung. Cucumis.....	℥j.	M.
R.	Bismuthi Subnitrat.....	℥j	
	Ung. Aquæ Rosæ.....	℥j.	M.

In the more chronic forms of eczema rubrum of the face and scalp, more stimulating ointments are well borne, as this:—

R.	Picis Liquidæ.....	℥ss	2
	Pulv. Zinci Oxidi.....	℥ss	2
	Ung. Aquæ Rosæ.....	℥j.	M. 32

Instead of anointing with ointments, the cheeks and scalp, or other affected parts, may be painted with the following pigment, which is very effectual, and cannot be rubbed off like the ointments:—

R.	Ol. Cadini.....	℥j	
	Collodii.....	℥j.	M.

Put a small camel's-hair brush in the cork.

The prognosis of infantile eczema is always favorable, and it is right to use every effort to cure the case. To postpone treatment and say, "oh, it will get well after teething," is, I think, unjustifiable and cruel.

Eczema Marginatum. (See *Tinea circinata*.)

Elastic Skin Man. (See *Dermatolysis*.)

Elephantiasis (iv). Elephantiasis is a chronic hypertrophic disease of the skin and subcutaneous connective tissue, characterized by enlargement and deformity of the part affected, accompanied by lymphangitis, swelling, œdema, thickening, induration, pigmentation and papillary growth.

The affection usually begins by an attack like erysipelas, with lymphangitis, pain and fever, followed by slight enlargement of the part. Similar attacks subsequently occur from time to time, the limb or region involved being slightly increased in size upon each occasion. At the end of a year or more, after a number of these attacks have taken place, the part is usually found to have increased considerably in size, to be chronically swollen, œdematous and hard. In the limbs, the leg particularly, not only will the entire member be found enlarged, but the skin itself decidedly hypertrophied, as shown by the prominent papillæ, fissures, and more or less discoloration and pigmentation. The process usually goes on until very considerable deformity results. The appearance of the disease varies in one part or another of the body. The commonest seat of disease is in the leg, one limb alone being generally attacked. The genitalia are next in point of frequency attacked. Other regions are more rarely assailed.

The amount of pain attending the disease varies; it is sometimes severe during the inflammatory attacks, while at other times and in other cases no pain is felt. The increased weight of the part, as in the case of the scrotum or leg, may interfere with locomotion.

Elephantiasis is found in all parts of the world, but is far commoner in tropical regions, where it seems to be endemic. Of late it has been supposed to be due to the presence of low animal organisms, known as *filariæ*, in the blood and lymphatics, giving rise to obstruction and inflammation in the latter.

The treatment of elephantiasis may be medicinal or surgical. During an inflammatory attack, rest, with cold or hot applications and local sedatives are called for. After the pain and heat have subsided, inunction, with ung. hydrargyri or ung. hydrarg. ammoniat, may be practiced, and the limb, if that

is the part attacked, is then to be encased in a closely fitting bandage, alone or in connection with other remedies. An excellent local application at this period is the earth bandage as employed by Hewson, of Philadelphia. This is essentially a scultetus bandage, on the strips of which has been spread a thin layer of kiln-dried clay earth, made into a thick paste with water. The strips having been carefully applied, a roller bandage is put on to keep them in place, and the limb kept immobile until the clay has dried. The gentle, uniform, but powerful contraction of the dessicating clay makes it one of the most satisfactory dressings which can be applied. A new bandage should be put on daily, and I can testify, from personal observation, to the beneficial effects of this too-little-known plan of treatment. Some such treatment as this, with rest, is the most appropriate, and should be persevered in as long as it seems to do good. Internally, quinine may be given during the exacerbations, with a view of abating the fever. Iodide of potassium has also been recommended, but I doubt the efficacy of this remedy. Change of climate is sometimes of great importance. In cases where the disease has been contracted in a tropical climate, if the person seeks a more temperate region before the hypertrophic condition is far advanced, the attacks of fever often cease, and much may be hoped regarding recovery. On the other hand, if he remains in a tropical climate, repeated exacerbations of fever occur, each followed by a progressive advance in the hypertrophic process, and recovery is almost impossible. Ligation of the femoral artery was formerly practiced in a number of cases of elephantiasis of the leg, but I believe this operation has been given up. When the scrotum is attacked, an operation with the knife is the best treatment.

The prognosis of elephantiasis, once fully developed, is unfavorable as regards entire cure. Much may be done, however, in the earlier stages of the disease, to arrest its progress.

Great deformity attends the disease, the "elephant leg" being a favorite and striking illustration in works on surgery. Elephantiasis rarely terminates fatally, though it is said a fatal result may follow an inflammatory attack in rare cases.

Elephantiasis Græcorum. (See *Lepra*.)

Ephidrosis Cruenta. (See *Purpura*.)

Epithelioma of the Skin (vi). Epithelial cancer of the skin may be either *superficial*, *deep-seated*, or *papillary*. The superficial or "flat" epithelial cancer usually makes its appearance as one or more grouped, small, yellowish or reddish papules or elevations, having their seat in the upper layers of the skin. The disease may originate in a sebaceous gland, wart, or other growth, or in the form of a flat infiltration. After a time, it may be months or even years, the tubercle, wart, or infiltration, as the case may be, becomes fissured or excoriated, a slight brownish crust forms upon it, under which is a scanty, watery, or viscid secretion. The course of the disease is slow, but gradually new lesions appear, usually connected with the original one, and finally the tubercles break down, and ulceration of a superficial character sets in. The ulcer, at first small, may spread until it attains the size of a coin, or even of the palm of the hand. The ulcer is characteristic. It is usually roundish, but may be quite irregular, with either sloping or sharply defined edges. The border may be smooth and on a level with the skin, but is usually elevated into a pearly ridge all around the ulcer. Its base is usually hard, and secretes a scanty, viscid fluid; it bleeds readily. There is usually a peculiar and characteristic picking or crawling sensation in the lesion when it first begins to become fissured or excoriated, but there is usually no pain unless the ulceration is considerable. When fully developed the ulcer may remain *in statu quo* for an indefinite period, the patient's health, meantime, being excellent; or it may pass into the infiltrating, deep-seated

variety, to be described. The lymphatic glands are not involved.

Rodent ulcer is a form of this variety of epithelial cancer. Its most frequent seat is upon the eyelids, particularly near the inner canthus, and next to this upon the side of the nose. When fully developed it consists of a circumscribed, sharply defined, greater or less excavation, with a brownish-red or purplish-red, dry, or scantily secreting, mamillated surface, the ulcer having often a rolled border. Its course is very slow but relentless; it invades every tissue with which it comes into contact, including muscles and bones. If neglected, great destruction of the parts may ensue, and even death from hemorrhage in very advanced cases. A peculiarity of this form of epithelioma is, that it is a disease of the upper part of the face, occurring usually above a line drawn across the face horizontally, on a level with the *alæ nasi* and the lower border of the ears.

Deep-seated variety. This variety of epithelioma, known also as the "infiltrating variety," is much more serious than the superficial variety of the disease. It begins as a split-pea-sized tubercle, situated in the skin and subcutaneous connective tissue. It sometimes, however, begins in a wart, like the superficial variety. It is reddish or purplish in color, surrounded by an areola, firm and hard to the touch, and accompanied by infiltration of the surrounding tissues. In a longer or shorter time, according to the malignancy of the case, usually months, ulceration usually begins, either from within or upon the surface, the tumor breaks down, and an ulcer of variable size results. This is deeply excavated, irregular in shape, with a violaceous base, secretes a viscid, offensive fluid, bleeds rapidly upon being touched, and is surrounded with infiltration, the skin being reddish in the neighborhood. The lymphatic glands become enlarged at a later period, the lancinating pains, which are often experi-

enced from the beginning, become more severe, the patient suffers extremely and finally succumbs through marasmus and exhaustion. The course of this disease though sometimes slow, is occasionally rapid. Duhring alludes to a case where the disease ran its fatal course in a year.

Papillary variety. In this variety of epithelioma, the lesion begins as a wart of split-pea size, or occasionally as a raised, lobulated, more markedly papillary formation of larger area. The surface is sometimes covered with dry, horny, epidermic scales, at other times it is moist and macerated. There are usually fissures secreting an offensive fluid, with sometimes cheesy, sebaceous matter. The fungous-looking granulated surface sometimes develops into fleshy protuberances, and at other times spreads out more flatly. After a time it breaks down into a characteristic epitheliomatous ulcer, running the usual course. Occasionally the papillary growth proceeds from a pre-existing superficial or deep, infiltrated ulcer.

Epithelioma is most commonly met with on the face, either on the lips or tongue, about the nose, the eyelids, the forehead, the temples, or upon the scalp. The genitalia, especially the penis and the scrotum in the male, and the labia in the female, are not uncommon seats of the disease. Epithelioma rarely occurs elsewhere, although it may be found in any part of the body. The lesion is usually single.

The exciting causes of epithelioma are often obscure. Epithelioma of the lip or tongue often starts at a point where the mucous membrane has been irritated by a pipe-stem or a jagged tooth. Warts and nævi, both pigmentary and vascular, are structures in which it often originates. The disease is commoner among men than among women. It is much less malignant than any other form of cancer.

The diagnosis of epithelioma is usually not difficult, excepting in the earlier stages. It may be confounded with syphilitic tubercles and ulcerations, acuminated warts and

lupus. The papule or ulcer of epithelial cancer, especially if about the genitalia, may also resemble chancre; but the history of the case, the duration of the lesion, and a careful examination of its features, will aid in arriving at a correct opinion. The later syphilitic manifestations run a much more rapid course, and change in appearance more rapidly than epithelioma, and when ulcerative their secretion is much more abundant and purulent. Nevertheless, it is not rare, in my experience, to see cases of epithelioma about the face, which have been mistaken for the tubercular syphiloderm, and *vica versâ*. What lends additional difficulty to the diagnosis in these cases is, that now and then the syphilitic lesion becomes transformed into epithelioma. I recall the case of a middle-aged woman showing a small ulcer near the inner canthus of the eye, which after some hesitation was pronounced syphilitic, and being treated with iodide of potassium healed up, returning again six months later, however, as unmistakable epithelioma, and quite uninfluenced at this time by the anti-syphilitic treatment. In making a diagnosis between syphilis and epithelioma in any case, the points mentioned should be borne in mind, and also the facts that the tubercular syphiloderm when ulcerating, usually shows several points of suppuration, while epithelial cancer is commonly single, and also that there is induration under and about the cancerous sore, while the syphilitic ulcer terminates abruptly against the sound skin. Finally, in cancer there is usually a picking and crawling sensation at first, and later lancinating pain. Syphilis is painless.

Many epithelial cancers begin as warts, and it is often difficult to distinguish between a simple wart and a cancerous wart. Usually continued observation alone will decide. In elderly persons, any change in a wart of old standing upon the face, especially those flat, brown warts, not uncommon in advanced life, must be looked upon with suspicion.

From lupus vulgaris, the diagnosis of epithelial cancer is chiefly to be made by the history. Lupus is a disease usually beginning in early life, and commonly has a long history. It is apt to be found in more parts of the body than one. When ulceration takes place, the diagnosis becomes more difficult, but a careful examination of the surrounding parts will commonly show some characteristic lupus lesions in the neighborhood. The discharge from a cancerous ulcer is usually pale, scanty and viscid, and is often offensive; that from lupus is yellowish and puriform, and is not offensive.

The treatment of epithelioma is external and local. The disease is to be removed as soon as the diagnosis is established. The knife, caustic, actual cautery or galvano-cautery may be employed, as seems most advisable in the particular case. Care must be taken to remove the entire growth, and even to go a short distance into the surrounding healthy tissues. Small and superficial epitheliomata are best removed by means of caustic applications, of which potassa fusa is the best. A stick of caustic potassa is to be wrapped in a rag, leaving only the point exposed, and this is passed over the growth, gently at first, to dissolve the horny epithelium, when this exists, and then the potash stick is to be bored into every part of the substance of the growth. While operating, the unhealthy tissues are found to give way very readily, so that it may easily be perceived, by the increased resistance offered, when the caustic reaches sound tissue. It must be remembered that the action of the potassa always proceeds a little farther after the caustic has been withdrawn. This must be borne in mind when operating in the neighborhood of important organs, as the eye, or where arterial branches may become involved. The application of the caustic potassa gives rise to severe pain, which, however, rapidly ceases after its withdrawal. When the effect has proceeded as far as is desirable, dilute acetic acid or weak vinegar, applied on rags,

will neutralize the caustic influence, and put an immediate end to the pain. There is rarely any hemorrhage. The part operated on may be dressed with olive oil or some soothing ointment. The dressing is to be changed daily, and the eschar usually falls off at the end of a week or ten days, after which a rapidly granulating surface ensues, ending in an insignificant scar.

Pyrogallic acid in an ointment of the strength of a drachm to the ounce, applied on cloths, from two to six days consecutively, is a good remedy in certain cases, particularly when the patient cannot bear pain. It is usually painless. It may have to be re-applied, from time to time, the slough being cut or scraped away as it forms. Pyrogallic acid should not usually be trusted in the patient's hands, as too much action may be produced, or the effect may penetrate too deeply.

Among other means of removing epithelioma the galvanocautery, especially in operations near the eye, is recommended by those who have used it. Scraping with the dermal curette, or sharp spoon, alone, or followed by the actual cautery, is another mode of removal. For the use of the knife, which is not needed in the majority of superficial epitheliomata, if these are taken in time, reference may be made to the standard works on surgery.

The prognösis of epithelioma is unfavorable, excepting in the small and superficial lesions. Relapses are apt to take place after operation.

Eruptions, Feigned, Factitious or Artificial. (See *Feigned eruptions*.)

Eruptions, Medicinal. (See *Dermatitis medicamentosa*.)

Erythema (ii). Six varieties of erythema may be mentioned: *E. simplex*, *E. intertrigo*, *E. vaccinium*, *E. variolum*, *E. multiforme* and *E. nodosum*. Of these the first four are simply hyperæmic, with little or no inflammatory exudation,

while the last two are characterized by more or less exudation of a plastic character, and are dissimilar enough to demand separate description. The erythemata disappear without leaving any mark or scar.

Erythema simplex is characterized by redness, occurring in the form of variously-sized, diffused or circumscribed, non-elevated patches, irrespective of cause. There are two varieties: the idiopathic, under which head are included the erythemata occasioned by heat and cold, continued pressure or rubbing, and the action of irritant or poisonous substances, as mustard, arnica, various dye-stuffs, acids and alkalies; and the symptomatic, due to some general derangement of the economy, as disorders of the stomach and bowels, etc. Certain general diseases are at times accompanied by hyperæmia of the skin, which shows itself in the form of roundish spots, the size of a pea or finger nail, to which the name *roseola* has sometimes been given. It denotes simply the form of erythema, and in no way indicates the nature of the disease which has brought it forth.

The treatment of erythema must obviously depend upon its cause in any given case. The removal of the obvious cause is alone usually sufficient in idiopathic erythema, but in the symptomatic form of the disease the internal disorder to which the cutaneous manifestation is due must be diligently sought out and treated, with a view to removal. Locally, soothing and astringent lotions may be employed. A much-used lotion in erythema, when the skin is unbroken, is the following:—

R.	Acidi Hydrocyanici, dil.....	℥j	
	Bismuthi Subnitrat.....	℥j-ij	
	Aquæ Aurantii Flor.....	f ℥iv.	M.

SIG.—Outside use.

The old “calamine” lotion, slightly modified, may also be used:—

R. Pulv. Zinci Carbonat. Præcip.,
 Pulv. Zinci Oxidî,
 Pulv. Amyli,
 Glycerinæ.....āā..... ʒiv
 Aquæ..... O ss. M.

Dilute lead water, or lead water and laudanum, or simple alcohol and water, may be used with satisfaction in most cases. As for powders, though useful, they will be found in practice difficult to keep in contact with the skin. Ointments are very apt to disagree in simple erythema, and should, therefore, as a general thing, be eschewed.

Erythema intertrigo is characterized by redness, heat and an abraded surface, with maceration of the epidermis. It occurs chiefly in those parts where the natural folds of the skin come in contact with one another, as about the nates, perineum, groins, axillæ, and beneath the mammæ, and is produced by the friction of two opposing surfaces. It is especially common among fat persons, women with pendulous mammæ, and infants whose skin is tender. The skin feels chafed and becomes hot and sore. Perspiration also, at times, macerates the epidermis, and gives rise to the secretion of an acrid, mucoid fluid. If neglected, a true dermatitis may set in. The affection comes suddenly, and if taken in time may usually be quickly checked, but if not treated it soon becomes very annoying. Occurring between the nates, a common seat of the disease, it may interfere with walking. It is usually harder to cure in infants, where the diaper, saturated with more or less acrid secretions, is constantly in contact with the skin.

The disease is one of summer rather than winter, although it may occur at any time of the year, if sufficient cause be present. It is sometimes brought on by wearing rough under-clothing. I have known severe erythema intertrigo of the nates and thighs caused by walking about, after sea-bathing,

in wet bathing clothes. The rough surface of the flannel, as it dries, becomes coated with minute acicular crystals of salt, which cut like tiny knives. The patient sometimes supposes himself to have been "poisoned" by a hired bathing dress, when the cause of his erythema is purely mechanical, as just mentioned.

The treatment of erythema intertrigo is commonly an easy matter. As a rule, very little is required beyond cleanliness and attention. The parts should be washed with cold water alone, or with the sparing addition of castile soap, and dried with a soft rag or towel. The folds of the skin are to be separated and kept apart by pieces of soft linen, lint or absorbent cotton. Dusting powders are the most convenient remedies in most mild cases. When there is little discharge, or none, starch or lycopodium may be used. Starch, however, is apt to cake and sour if dusted on a moist surface. The following powders are much less liable to this objection, and may be used alone or in combination: Oleate, oxide and carbonate of zinc, carbonate and subnitrate of bismuth, magnesia, fullers' earth, kaolin and talc. When starch is admissible, and there is no break in the skin, the following preparation is one of the best:—

R. Pulv. Camphoræ..... ℥ iss
 Pulv. Zinci Oxidi,
 Pulv. Amyli.....āā..... ℥j. M.

To be made into a perfectly impalpable powder.

The mixture should be kept in a tightly-corked, wide-mouthed bottle.

In cases which are obstinate, diluted black wash, applied several times a day, alone or followed by the use of some bland powder, as above, is an efficacious remedy. Dilute alcoholic lotions, composed of alum or sulphate of zinc, a few grains to the ounce, also prove serviceable in stubborn cases. In intertrigo about the thighs and genitalia there is

often an element of hyperidrosis. In these cases tincture of belladonna may be painted on the parts daily and followed by one of the more astringent powders, as the oxide of zinc. In the case of infants, when the intertrigo is about the anus, and the stools are thin, with an acid smell, the following powder may be given internally:—

R. Calcis Præcipitat..... gr. iss
 Bismuthi Subnitrat gr. ij
 Sacch. Alb..... gr. iij. M.
 SIG.—One, thrice daily.

When the stools show casein, minute doses of hydrochloric acid may be given.

In addition to the common forms of erythema simplex and E. intertrigo, the following varieties are worthy of special mention.

Erythema infantile, sometimes called “roseola infantile,” is a not infrequent symptom of gastric disturbance in infants. It also results at times from the presence of worms, teething and various febrile complaints of infancy and childhood. It occurs chiefly on the trunk, both anteriorly and posteriorly, and to a less degree on the face and extremities. The lesions may be split-pea sized, discrete spots, or a diffuse punctate redness. It is usually very ephemeral. Erythema infantile may be mistaken for scarlet fever or measles, but the absence of high fever and of the characteristic symptoms of the latter affection, as they show themselves elsewhere than on the skin, will decide the question.

Erythema vaccinum, sometimes called “roseola vaccinia,” displays small or large, reddish, erythematous patches over the trunk and extremities. It occurs either on the first or second day after vaccination, or else at the period of beginning maturation of the vaccine vesicle, about the eighth or ninth day, rarely later. There is usually some fever. The eruption may be mistaken for the erythematous syphiloderm,

and sometimes patients imagine that syphilis has been inoculated with the vaccine virus. It is important, therefore, to make the diagnosis. Of course, the history of syphilitic inoculation, with the double incubation period, etc., is conclusive. The dusky red of erythema is also very different from the usual fawn color of the erythematous syphiloderm. (For an account of other eruptions following vaccination, see *Vaccination eruptions*.)

Erythema variolosum, one of the prodromal rashes of small-pox, is important as an aid to the early diagnosis of the latter disease. It appears as a diffuse punctate redness, or in discrete, erythematous patches, often accompanied by small petechiæ. The characteristic locality of the eruption is over the abdomen and inner side of the thighs, also the flexor surface of the elbows and knees, the dorsal surfaces of hands and feet, the axillæ and a triangular space over the sternum. It sometimes assumes the shape of long stripes over the tendon of the extensor longus of the dorsum of the foot. Rarely this form of erythema may attack the face and extremities. A later form of this variety of erythema may occur during the stage of suppuration and exsiccation. It may be local or may extend over the whole surface, and is apt to be accompanied by redness of the pharynx.

Erythema Gangrenosum. (See *Dermatitis Gangrenosa*.)

Erythema Multiforme (ii). This, which is a disease related, to a certain degree, with erythema simplex, and yet differing from it, perhaps, chiefly, in the greater amount of exudation, is characterized by the occurrence of reddish, more or less variegated macules, papules and tubercles, occurring discretely or in patches of various size and shape. The name has been given to this form of erythema, on account of the protean character of the lesions which manifest themselves as erythematous patches of the most varied shapes and sizes, or as papules, vesico-papules and tubercles, scattered or in

groups. Various names are given, denoting the arrangement of the lesions. Thus we have *E. annulare*, occurring in circular patches; *E. iris*, occurring in concentric rings, often of beautifully variegated colors, as red, purple, yellow and blue. Sometimes the circles are very large, or are broken and assume gyrate forms; this is *E. marginatum*. Distinct papules and tubercles occur in *E. papulatum* and *E. tuberculosum*. Erythema papulatum is the commonest variety. It shows itself in the form of isolated or aggregated flat papules of varied size and shape, bright red, bluish or purplish in color, and which soon fade, seldom lasting longer than a week or ten days. *E. tuberculosum* is simply an exaggeration of this form, and all of the varieties mentioned are but forms and stages of the same process, and are often met with, two or more occurring together simultaneously on the same individual. The lesions of *E. multiforme* disappear spontaneously, leaving, perhaps, slight pigmentation and desquamation.

Erythema multiforme is usually found on the backs of the hands and the fingers, forearms and legs occurring simultaneously. It may show itself on the face and trunk. Sometimes it attacks the mucous membranes. Now and then it is general, involving the whole surface. A marked feature of the disease is the disproportion between its appearance and the subjective symptoms to which it gives rise. Notwithstanding the angry look which the eruption often assumes, there is very little itching or burning. Sometimes constitutional symptoms, as malaise, headache, rheumatic pains, and gastric derangement, are present in marked cases.

The affection is much commoner in the spring and fall, although it sometimes occurs at other periods of the year. It is among the eruptions of the skin more frequently met with in this country. The statistics of the American Dermatological Association show 683 cases of erythema multiforme

among nearly 59,000 cases of skin diseases reported—a proportion of 1.16 per cent.

The papular form of erythema multiforme is sometimes brought on by derangement of the stomach, and runs a course resembling that of urticaria. Genito-urinary diseases are said to dispose toward the occurrence of the efflorescence.

In the majority of cases no active treatment is called for; light diet, the avoidance of stimulating drinks, mild saline laxatives, with the local application of dilute alcohol, or of carbolic acid, may be employed, as this:—

R.	Acidi Carbolicæ.....	3j	
	Glycerinæ.....	f3j	
	Aquæ.....	Oj.	M.

Dusting powders, as that of camphor, oxide of zinc and starch, given under erythema intertrigo, also prove useful at times.

Erythema Nodosum (ii). This affection is characterized by the formation of rounded or ovalish, variously-sized, more or less elevated, reddish nodes. The disease is apt to be ushered in with some disturbance of the system; the nodes often appear suddenly; they may come on any part of the body, but are commonly found on the legs and arms. They vary in size from a small nut to an egg, are reddish in color, tending to become bluish or purplish. As they disappear, they undergo various changes of color, like a bruise, and it is often difficult to distinguish the lesions from ordinary contusions, especially when they occur over the shins. When the disease is at its height, the lesions have a tense, shining look, as if they contained fluid, and often an indistinct sense of fluctuation is perceptible. They never suppurate, however. Not unfrequently they are more or less hemorrhagic in character. They vary in number from a few to a dozen or more. They come out, as a rule, in crops. They are painful or tender on pressure, and are usually

attended by burning sensations. Sometimes the lymphatic vessels are involved. The affection usually terminates in recovery in two to four weeks. An "ominous" form has been described by authors, which is said to be the precursor of tuberculosis. I myself saw one case, in which a little boy, after suffering for three or four weeks with erythema nodosum, fell into a delirious condition and died, with the symptoms of tubercular meningitis.

Erythema nodosum is a rare disease. The statistics of the American Dermatological Association show that it occurred only twenty-seven times in 16,863 cases of skin disease.

No active treatment is called for. Rest in the recumbent posture, the correction of any functional derangement; quinine, if required, is all that will usually be needed. If there is a family history of tuberculosis, it will be better to give cod-liver oil from the beginning.

Excoriations, Neurotic. (See *Neurotic Excoriations*.)

Exfoliative Dermatitis. (See *Dermatitis Exfoliativa*.)

Farcy. (See *Glanders*.)

Favus. (See *Tinea favosa*.)

Feigned Eruptions. Eruptions, self-produced, with or without the intention to deceive, are probably of more frequent occurrence than would be supposed, from the rarity with which such cases are found reported in medical journals. Such cases are commonly found among hysterical women, or among soldiers, sailors and prisoners, who are apt to be malingerers. Sometimes they assume the form of erythema, or urticaria, circumscribed dermatitis, pemphigus, or other bullar eruptions, and occasionally, even ulcers and gangrene have been produced. In rare cases, ecchymoses, whitlow, alopecia, sooty sweat, or the appearance of minute insects, have been brought about artificially. Two points must be remembered in such cases. First, the disease is almost always anomalous in the time, place, or manner, of its appear-

ance, and in the course it runs. Second, it almost always shows some sign of having been artificially produced, and is almost invariably in a position easily and conveniently accessible to manipulation. Thus the face, forearms, chest and mammary region, and after these the lower limbs, are most apt to be the seat of the eruption. If, in addition, any motive for malingering, or for exciting interest and sympathy, can suggest itself, the case should be very carefully looked into from this point of view. The lesions and their neighborhood should be examined, with a view to detecting any trace of the use of mechanical irritants, or of such domestic articles as are apt to be used; mustard, vinegar, cantharides, nitric acid, etc., have all been employed. The examination should always be so made as to avoid suspicion of its object, and if the physician comes to a positive conclusion that the eruption, in any given case, has been artificially produced, let him not think of proclaiming his conclusion, which will probably only lead to the suspicion, on the part of friends and relatives, that he does not know his business. Better to treat such cases with placeboes, and have them recover spontaneously, without forcing the patient to admit a deception, or pitting one's reputation for sagacity against the patient's veracity. Of course, I have chiefly in mind the case of women feigning skin diseases.

Fibroma Molluscum. (See *Molluscum fibrosum*.)

Filaria Medinensis. (See *Guinea worm*.)

Filaria Sanguinis Hominis. A parasite found in the blood vessels and lymphatics, and thought to be largely concerned in the causation of elephantiasis, at least in eastern countries. (See *Elephantiasis*.)

Fish-skin Disease. (See *Ichthyosis*.)

Fissures in the skin are generally due to eczema. (See *Eczema*.) They usually occur in places where the skin is rendered unusually brittle by inflammation, and at the same

time is subject to flexure. The ends (pulp) of the fingers and flexures of the fingers and toes are common seats of fissures. Also the muco-cutaneous juncture of the mouth and anus, and the posterior part of the ear where it joins the scalp. The treatment of fissures is usually at first stimulant, and then protective. Chaps and fissures about the lips and anus should be slightly torn open, and then touched with a point of solid nitrate of silver or a sharpened match smeared with a strong red oxide of mercury ointment, 40 to 60 grains to the drachm. Ointments containing tar are also useful, as described under eczema of the anus. Fissures behind the ears may be treated in the same manner, with a slightly milder degree of stimulation. Fissures occurring in the ends of the fingers may be treated by soaking in hot water, to soften the thick epidermis, and then rubbing in a ten per cent. solution of oleate of mercury, or, if painful, with equal parts of the ten per cent. oleate of mercury and oleate of morphia. If the cracks are deep, they may be touched with the solid nitrate of silver stick, after preliminary soaking in hot water, and may then be painted with a solution of gutta percha for protection. Or the soaked finger ends may be rubbed with a 5-15 grain solution of caustic potassa, and then kept constantly wrapped in unguentum diachyli. I mention these various remedies, because what will suit one case will do no good in another. Each must be tried in turn; much perseverance must be exercised, and, at best, a very guarded prognosis must be given in fissures of the finger ends. In some cases they seem, like dryness and brittleness of the hair and splitting of the nails, to be rather the expression of a constitutional peculiarity than a disease.

Framboesia (vi), called also yaws, pian, and endemic verrugas, is an endemic disease characterized by general and cutaneous symptoms, occurring in the West Indies and other tropical countries. The eruption consists of variously-sized

papules, tubercles and tumors, of a reddish or yellowish color. The lesion appears as a yellowish or whitish point or spot, which gradually enlarges and projects from the surface, looking, when fully developed, like a piece of cotton wick, a quarter of an inch or less in diameter, dipped into a dirty yellow fluid, and stuck on to the skin, in a dirty, scabby, brownish setting, and projecting to a greater or less extent. Or at times the lesions look like red currants, with flat tops, of a bright pink color, glassy, semi-transparent. Larger lesions look like cherries. The tubercles may be smooth, scaly or ulcerated. The eruption generally manifests itself on the face, upper or lower extremities and genitalia. The largest growths occur on the lips, eyelids, toes and genital organs. The lesions are not painful or itchy. The disease is probably not hereditary. Most observers consider it contagious. It bears no relation to syphilis. The treatment which is effective consists of hygiene, good food and tonics, with cleanliness and the use of carbolic acid solution, or a weak nitrate of mercury ointment locally.

Freckle. (See *Lentigo*.)

Furuncle (ii), commonly known as boil, is a deep-seated, inflammatory disease, characterized by one or more variously-sized, circumscribed, more or less acuminate, firm, painful formations, usually terminating in central suppuration. Boils may occur singly, or oftener in numbers. When they occur in successive crops the condition is known as furunculosis. The lesion, at first a small, ill-defined, reddish spot, situated in the true skin, and tender and painful from the first, soon becomes larger, slightly elevated, and shows a tendency to suppurate about its centre. It arrives at maturity in a week or ten days, and is then a slightly-raised, rounded or pointed formation, with a suppurating centre, called the *core*. At times no centre of suppuration forms; it is then called a "blind boil." The size of a boil may vary from that of a

split pea to a large coin. Its color is dusky red ; it usually gives rise to a dull, throbbing pain, increasing in intensity until suppuration takes place, and then subsiding. Boils are exquisitely tender ; the least touch causes pain.

Though the boil may attack any part of the body, its favorite seats are the face, ears, neck, back, axillæ, buttocks, perineum, scrotum, labia and legs. Sometimes it is accompanied by some general constitutional disturbance. Neighboring glands may be sympathetically enlarged.

Boils sometimes occur as complications or sequelæ of other diseases, *e. g.* eczema. An acute attack of eczema often winds up with a crop of boils. Sometimes the boil tends to return again and again in about the same spot.

The causes giving rise to boils are various and sometimes obscure. Often they are the result of a low and depraved condition of the system. General debility, overwork of a mental sort, excessive bodily fatigue, nervous depression, improper food and irregularity of the functions of the body are among the common causes of boils. They are sometimes encountered, however, in persons apparently enjoying perfect health, and given to active and varied out-door exercise and amusement. The boils to which the hydropathist points with pride, as evidence that the peccant humors are being "driven out," are in reality the evil result of erroneous hygiene and regimen. Boils not unfrequently occur in the course of other diseases, as diabetes, chlorosis, fevers, uræmia and septic pyæmia. Occasionally certain atmospheric conditions, prevailing chiefly in the spring and autumn, seem influential in determining the occurrence of boils, which at times appear to prevail as a sort of epidemic.

The diagnosis of furuncle is generally easy, the affection being familiar to every one. From anthrax, or carbuncle, it differs in only having one point of suppuration—the core—while the former has several or many such centres. The

furuncle also is inclined to be rounded or acuminate; carbuncle is flat. Furuncle is small; carbuncle varies in size, from half an inch to three or four or more inches in diameter; furuncle is tender to the touch; carbuncle, though spontaneously painful, is not tender. Boils generally occur in numbers; carbuncle is commonly single. Now and then certain pustular syphilodermata resemble boils, but their indolence, painlessness and darker, duskier color, together with the chronic slow course which they run when unaffected by treatment, will rarely permit difficulty in the diagnosis.

The successful treatment of boils is, at times, by no means easy. Each case demands careful study, with the view, if possible, of ascertaining the cause at work, and obviating this, if it can be done. The various functions of the body are to be carefully regulated. The diet should be of good quality and varied. Wine and malt liquors may be prescribed in rare cases, and when the patient is not accustomed to their use. The regimen should be moderate and conducive to the general improvement of the system. Fresh air and out-door exercise are to be urged in most cases. Tonics are very often called for. Quinine in considerable doses, as much as sixteen grains per diem, and iron, alone or with strychnia, may be given. Cod-liver oil is also suitable in some cases. The *mistura ferri acida*, so often prescribed in eczema, etc., is useful at times:—

R. Magnesii Sulphat.....	℥j
Ferri Sulphat.....	gr. iv
Sodii Chloridi.....	℥ss
Acidi Sulphurici dil.....	f℥ij
Infus. Quassia.....ad.....	f℥iv. M.

SIG.—Tablespoonful in a tumblerful of water, before breakfast.

Arsenic, alone or in combination with iron, is sometimes useful. The following is a convenient formula:—

R. Liquor Potassæ Arsenitis..... fʒij
 Vini Ferri.....ad..... fʒiv. M.
 SIG.—Teaspoonful, three times a day, after meals.

Other remedies are: the sulphite or hyposulphite of sodium, in fifteen to thirty-grain doses, every two or three hours; sulphide of calcium, in doses of one-eighth to one-quarter of a grain every two hours; liquor potassæ, in ten to twenty minim doses, with a bitter infusion, as calumba or quassia; fresh yeast, in tablespoonful doses, three times daily; syrup of the hypophosphites of lime, iron, soda and potassa; tar water, up to a quart daily, and phosphorus. Such are the remedies most usually relied upon in the treatment of furunculosis. No one can be recommended as a specific; what will do good in one case may fail in another.

Locally, one method of aborting the forming boil may be recommended; it is when a hair is growing out of the centre of the boil to pull it out. This will sometimes check the further development of the boil. The application of cold, in the form of powdered-ice poultices, is recommended by Hebra. The use of caustics, as a red-hot needle, nitrate of silver, or a mixture of equal parts carbolic acid and glycerine, nitric acid, or acid nitrate of mercury, may be used to the apex of the forming boil. Wilson recommends, when the areola is forming, the application of a galbanum plaster with opium, spread on chamois skin. It is said that under this application the pain ceases, and the separation of the core takes place painlessly. When the boil begins to discharge, a hole is cut in the plaster, to permit the escape of the products of suppuration. When the areola is of considerable size, a starch poultice may be applied, or a linseed poultice smeared with resin cerate, or when there is much pain, made with lead water. Incisions should not be employed at any stage.

Gangrene of the Skin. (See *Dermatitis gangrenosa*.)

Glanders (ii), called also *Farcy* and *Equinia*. A malignant, contagious disease, derived from the horse, and manifesting itself, after a period of incubation, by grave constitutional symptoms, with inflammation of the nasal and respiratory passages, and a deep-seated pustular, vegetating, tubercular ("farcy buds"), or hemorrhagic, ulcerative form of eruption. The disease is rare and frequently fatal.

The local treatment of glanders involves destruction of the virus by some cauterizing agent applied to each ulcer. Nitric acid, carbolic acid, and chlorine water, are to be preferred. As the abscesses form they should be opened and kept constantly cleansed by injections of permanganate of potassium solution and by carbolic acid. Ulcers of the nostrils are to be touched and washed with carbolic acid solution, and touched with tincture of iodine or solution of nitrate of silver. Internally, arsenic, nux vomica, carbolic acid, and especially iodide of potassium, are recommended, in addition to which, the general symptoms arising in each case are to be vigorously combated.

Glossy Skin. (See *Atrophy of the skin.*)

Graying of the Hair. (See *Canities.*)

Grocer's Itch. Eczema of the hands and arms, due to the irritation produced by handling sugar.

Guinea-worm Disease (ix). An affection chiefly of tropical countries, caused by a parasite known as the "Guinea-worm," *Dracunculus*, or *Filaria Medinensis*. It is particularly common along the west coast of Africa, in Senegal and Guinea, and in Egypt, Persia and India. I think it has also been met with in the southern United States and the West Indies. It attacks the skin, giving rise to marked inflammation, which manifests itself in the form of a species of boil or painful tumor. The full-grown worm is from $\frac{1}{24}$ to $\frac{1}{12}$ inch in thickness, and varies from several inches to three feet in length, according to its age. The young worm, when of

microscopic size, finds its way by boring into the skin and deeper tissues, and there takes up its habitat, growing gradually, for months, without attracting attention, until it attains a sufficient size to excite irritation and inflammation. Sooner or later a boil or tumor forms and breaks, showing the presence of the worm. Only one worm is present in each tumor, although a number of tumors may exist simultaneously. The disease is usually contracted in low, swampy places, by persons who go barefoot, and usually attacks the feet and lower extremities. The treatment consists in extracting the worm, inch by inch, and day by day, as soon as it makes its appearance on the surface, being careful not to break the creature during the operation. The internal administration of asa-fœtida, in one case with poulticing, appeared to draw out the worm, which was found entire in the poultice. Galvanism has also recently been applied with great success, one pole of a battery being placed on the head of the worm, and the other held by the patient.

Gumma. (See *Syphiloderma*.)

Hæmatidrosis. (See *Purpura*.)

Hair, Diseases of the. (See *Atrophy of the hair*, *Hirsuties*, *Alopecia*, *Canities*.)

Heat, Prickly. (See *Miliaria*.)

Hemiatrophia facialis. (See *Morphœa*.)

Hereditary Syphilis, Skin Affections in. (See *Syphiloderma*.)

Herpes. Herpes is an acute inflammatory affection, consisting of one or several groups of vesicles, occurring, for the most part, about the face and genitalia. Ordinarily, it occurs without any accompanying general symptoms, but sometimes there is concomitant slight malaise and feverishness. It is often symptomatic, occurring in the course of a common cold or of digestive disorders, or in pneumonia, pleurisy, remittent and other fevers, etc. The lesions are commonly

clustered, three or four together, of the size of a pin head to that of a small split pea, containing clear serum or sero-pus, situated on a somewhat inflamed base, and becoming quickly dried and covered with a yellowish crust. There is usually a certain feeling of tension and burning, with some itching. The affection runs an acute course, lasting a week or ten days. There are two regions, the face and genitalia, on which herpes is usually found, and from which the two varieties take their name.

Herpes facialis is ordinarily seen in the form of the well-known "fever blister." It occurs on the lips, alæ of the nose, and more rarely elsewhere on the face and about the ears. Herpes is also found on the mucous membrane of the oral cavity, forming those little, shallow, punched-out ulcers, called "cankers." On the tonsils, where herpes is occasionally found, it is apt to be mistaken for diphtheria, especially if extensive and accompanied by enlargement of the tonsils and by febrile reaction. Sometimes this form attacks several members of the same family simultaneously. The characteristic, discrete, punched-out ulcers, resulting from an early rupture of the vesicles, serve to establish the diagnosis. Herpes of the inside of the lips and of the tongue may be mistaken for mucous patches, but the latter are larger, flatter about the edge, and somewhat irregular in outline, gray in color, and with a reddish or violaceous edge. Herpes, on the other hand, is smaller, the lesions circular, or made up of intersecting circles, the edges sharply defined and punched out, and the color almost invariably yellowish.

Herpes pro genitalis is found on both males and females. The vesicles are usually four to six in number, varying in size from that of a pin's head to that of a split pea. They occur usually close together and are apt to coalesce. The whole area covered by the group of lesions is not greater than that of a quarter-dollar. The parts usually affected are, in the

male, the preputial sulcus, the lining of the prepuce, the glans, the margin of the prepuce and, more rarely, the shaft of the penis. In women, herpes progenitalis is very uncommon, excepting among prostitutes. The lesions are found upon the labia minora, prepuce of the clitoris, labia majora, clitoris, introitus vaginæ and, more rarely, on other neighboring parts. The attention of the patient is called by slight itching and burning; a small, red patch is observed, on which a crop of vesicles, at first clear, but soon becoming purulent, is observed. If situated on the mucous membrane the vesicle soon breaks down, so that the lesion which is, in fact, first noticed is a superficial erosion. Unless irritated, the lesions tend to heal within a week or two. The tendency to relapse is very marked. In the female it may recur with each catamenial period, while in the male each coitus may be followed by an outbreak. Venereal diseases of a non-syphilitic character, as gonorrhœa and balanitis, seem to predispose to the occurrence of the affection. It is confined, in the male, to the periods of youth and early manhood, but in the female may occur as late as middle age. Herpes progenitalis is apt to be mistaken for chancroid. In the earlier stages, indeed, the lesions are identical in appearance in both diseases. The number and distribution of the lesions is a great help. The lesions of chancroid are not so numerous as those of herpes, and are not grouped together in the way the latter are. When multiple the lesions of chancroid are the result of auto-inoculation, and are, therefore, of different ages. Time, also, shows the difference. After a few days the herpetic sore begins to get better, while the chancroid is getting worse. The syphilitic initial lesion need not often be confounded with the herpetic vesicle. It does not begin as a pustule; it is seldom multiple; it is indurated at some time in its course; is accompanied by indurated glands, and does not appear as a sore until some days after the exposure. In the female the

later syphilitic lesions may sometimes be mistaken for herpes, and *vice versa*. The same principles of diagnosis which come into use in distinguishing herpes from the other affections above mentioned will, however, be found of service in such cases, and in any case careful observation of the lesions for several days will much assist the conclusion. Eczema of the genitalia may resemble herpes, but the itching and generally severe and more extensive character of the eczematous disease serves to distinguish it.

The treatment of herpes facialis is very simple, a soothing ointment being usually all that is required. Now and then, when the disease is extensive and spreads over the face with violently inflammatory symptoms, as occurs in rare cases, a poultice of bread crumb and cold, dilute lead water, or fomentations with lead water and laudanum, may be required for twenty-four or forty-eight hours, after which an ointment of a drachm of subnitrate of bismuth to the ounce of cold cream may be employed as the lesions dry up and crust. Herpes progenitalis usually requires very little treatment. Sometimes, however, various remedies are required. The best remedy for ordinary use is dilute lead water, applied on a soft piece of linen or a whisp of absorbent cotton. Black wash is a good dressing in many cases; or finely-powdered nitrate of bismuth may be used. Sometimes more stimulating applications are required. Powdered calomel, sprinkled on the erosions morning and night, or equal parts of calomel and oxide of zinc may be used. When the disease is prone to recur, astringent washes may be employed as a prophylactic. Circumcision is sometimes useful in inveterate cases occurring in the male, but even this has been known to fail.

Herpes Circinatus. (See *Herpes iris* and *Tinea circinata*.)

Herpes Gestationis (ii). A rare affection of the skin peculiar to pregnancy. It consists in the development of ery-

thema, papules, vesicles and bullæ, vesicles predominating. They are attended with intense itching and burning sensations. They are commonly grouped, but do not follow any nerve tracts. The vesicles and bullæ vary in size; they may be pea-sized or as large as a walnut. The lesions usually first appear on the extremities, and afterward involve other portions of the body. It is an affection directly dependent upon the gravid state of the uterus. It may appear at any period of gestation, up to the seventh month, and, when present, usually continues until after delivery. It does not terminate its course immediately after delivery, but slowly retrogrades by the development of fewer and fewer vesicles; it is apt to recur with succeeding pregnancies. It is at times accompanied by urticaria, neuralgia and other neurotic affections. It appears to be a form of *Dermatitis herpetiformis* (Duhring).

Herpes Iris (ii) is an acute, inflammatory disease, characterized by one or more groups of variously-sized vesico-papules or vesicles, arranged in the form of concentric rings, attended, as a rule, by the display of varied colors. The patches vary in size from a small coin to several inches in diameter, and are made up of a number of usually rather indistinct vesico-papules or vesicles, which arrange themselves side by side, so as to form a perfect ring. It is a peculiarity of the disease, that new vesicles are constantly forming on the periphery while the centre is healing up. When there are a number of independent patches they sometimes coalesce, and the interstices of the concentric and variegated circles present a picture so striking that once seen it can never be forgotten. It looks, sometimes, as if the patient had been tattooed in rings of various colors, the prevailing tints being red, yellow and brown. The backs of the hands and feet, and the arms and legs, are the localities usually attacked, but sometimes the trunk is also involved. The eruption is almost entirely un-

accompanied by sensation of any kind. It tends to recur. It is a rare disorder, and is more apt to occur in the Spring and Autumn.

The disease is closely related to Erythema multiforme, described above.

Treatment is of but little avail, as a general thing. Large doses of quinine, given early in the attack, seem in some cases to have the effect of arresting the disease. The vesicles should be protected, or, if broken, soothing lotions or ointments, as in the treatment of acute eczema, may be employed.

Herpes Tonsurans. (See *Tinea tonsurans*.)

Herpes Zoster (ii) is an acute inflammatory disease, characterized by groups of vesicles, situated upon inflamed bases, usually accompanied by more or less neuralgic pain. The pain usually precedes the eruption, sometimes by several days. It is apt to be disproportionate to the amount of eruption. Occasionally it is entirely absent. The eruption makes its appearance in the form usually of an inflamed condition of the skin, attended with heat and burning sensations, and groups of discrete pin-head to split-pea sized vesicles, situated on a bright red surface, appear over the region. The vesicles are often crowded together so as to coalesce, forming irregular patches. New vesicles continue to appear until the fourth to the eighth day, when the eruption is at its height; it remains in this way a few days, and then begins to decrease, the vesicles shriveling, and by the tenth day or so leaving brown crusts, which drop off. The vesicles do not burst, as do those of eczema. Ten days to three weeks is the average duration of an attack. The eruption does not always run a typical course. Only a few vesicles may appear, or they may abort before fully developing. On the other hand they may suppurate and leave scars, though the disease commonly leaves no trace. The neuralgia varies from a very slight tingling to

the most excruciating pain. Herpes zoster may attack any part of the body, but is commonly found upon the trunk and head; less frequently upon the limbs. It follows very closely the course of the nerves, and the eruption is named according to the region upon which it occurs, as *Zoster capitis*, *Zoster brachialis*, *Zoster facialis*, etc. On the head it most frequently occurs in the course of the supra-orbital nerve, and it may affect the eye, giving rise to severe pain. On the head, both sides are sometimes affected; elsewhere the affection is almost always unilateral, so as to give rise to a popular superstition, that if the "shingles" (occurring on the trunk) should go all the way round the body the patient would certainly die. The chest is the commonest seat for the occurrence of the eruption; and the names formerly given to the disease, *zona*, *cingulum*, a girdle, indicate this. Involving the intercostal nerves, the neuralgia often causes the affection to be taken for pleurisy, until the eruption makes its appearance. When it occurs on the limbs the flexor surface is commonly attacked. It rarely occurs below the knee. The course of herpes zoster is acute, and though somewhat variable as to duration, it tends to recovery.

Herpes zoster rarely occurs twice in the same person. Now and then, however, cases are met with where it recurs year after year, perhaps six to nine times. Its etiology is obscure, but it is well recognized that the disease is dependent upon a peculiarly irritable or inflamed condition of the cutaneous nerve trunks and branches. Practically, the disease consists in an inflammation of the spinal ganglia, the influence of which is carried forward, along the nerves, to their termination upon the skin.

The diagnosis of well-developed typical herpes zoster presents no difficulty. The neuralgic pain, the appearance of the vesicles in distinct groups, upon a highly inflammatory base, and the tendency to preserve their form intact, are

characteristic. In eczema, which it most resembles, the lesions tend to exude moisture, dry and crust, while in herpes zoster there is no discharge. Eczema itches, H. zoster burns. From simple herpes, H. zoster is distinguished by the presence of pain, by its non-recurrence, its unilateral character, and by its rare occurrence upon the favorite seats of herpes, the lips, alæ of the nose, and genitalia.

The treatment of herpes zoster is largely palliative. The disease runs a naturally favorable course, tending to recovery, and the symptoms of neuralgia and burning in the seat of eruption alone require treatment. For the neuralgia, I know of no remedy more efficient than the phosphide of zinc, in doses of one-third of a grain, given at the commencement of an attack, and repeated every three hours. It may be combined with one-sixth of a grain of extract of nux vomica. If this fails in severe neuralgic cases, morphia may be given at night. Electricity, in the form of the constant galvanic current, often gives relief. Five to ten cells may be used, the sponge electrodes being placed along the course of the nerves, and directly to the seat of the eruption. The application should be made once, or if possible, twice a day, for fifteen minutes at a sitting. This application also relieves the after pains of herpes zoster, when these supervene on the eruptive stage. Among local applications, powders are only available when, by any chance, the vesicles have become ruptured. In other cases, lotions, ointments, or pigments, are more convenient. The following is a convenient powder:—

R. Pulv. Amyli,
 Pulv. Zinci Oxidi.....āā..... ʒ ss
 Pulv. Morphiæ Sulphat..... gr. ij. M.

It is a good plan to sew a soft flannel bandage around the affected part, after the application of this powder, to be removed only when required. This will prevent the rubbing

of the clothing, which is very irritating. Among lotions, lead water, lead water and laudanum, fluid extract of grindelia robusta, half an ounce to the pint of water, or the following zinc lotion :—

R. Zinci Carbonat. Præcip.,
 Pulv. Zinci Oxidi,
 Pulv. Amyli,
 Glycerinæ.....āā..... ʒ iv
 Aquæ..... Oss. M.

Ointments containing fifteen to twenty grains of extract of opium or extract of belladonna to the ounce, may be applied, spread upon cloths, or rubbed in with the finger, when the eruption occurs on the scalp. Among pigments, the essential oil of peppermint, painted over the crust of the affected nerve, and over the vesicles, if unbroken, is a very good application. Perhaps, the best application of all, in painful herpes zoster, is the following :—

R. Morphine Sulphat..... gr. v
 Collodii..... fʒ ss. M.
 Put a brush in the cork.

This may be painted over the vesicles, broken or unbroken, twice, or even three times, daily, and acts both as a protective and anodyne, at the same time.

The prognosis of herpes zoster is almost always favorable, the eruption running its course in a few weeks, in almost all cases. H. zoster of the orbital region, however, sometimes endangers the eye.

Hirsuties. (See *Hypertrophy of hair*.)

Hives. A popular name for various diseases of the skin, and other parts. In this country, sixty years ago, "Hives" was understood to mean what is now commonly called croup. Hence the name of the popular compound syrup of squills, "Coxe's Hive Syrup." In England, the term hives is applied to various skin diseases, chiefly, however, to chicken-

pox or varicella. In this country, at the present time, a patient who is said to have the hives will almost invariably be found to suffer from urticaria. (See *Urticaria*.)

Hordeolum (ii), or sty, is a small boil, seated at the edge of the eyelids, and involving a Meibomian gland. It is not an active kind of boil, but progresses sluggishly, the pustule centre being small. It is painful, and some time elapses before all traces of its existence go. There may be one, two, or more, on one or both eyelids (T. Fox). The general treatment is that of a boil. (See *Furuncle*.) I have obtained the best results from the administration of calcium sulphide in doses of $\frac{1}{16}$ grain every hour, until ten have been taken; to be repeated daily. Externally, an ointment of ten grains of red oxide of mercury to the ounce will be found useful in stimulating the lids to a healthy condition.

Horn, Cutaneous (iv). Cutaneous horns, when fully developed, differ little, as regards structure, from ordinary horns of animals. The excrescence is solid, hard, dry and wrinkled, or laminated. In form it is usually elongated and roundish, or conical. Sometimes it assumes a flattened or button-like form. The form is varied, but the horn is often twisted and misshapen. The color is grayish, yellowish, brownish or blackish. Horns may be of any size, from that of a pin's head to that of the finger. The base is concave or flattened, and rests upon the skin, which may be normal or inflamed. Horns are usually single, but may be multiple. They may occur upon any part of the body, but are commoner upon the face. Though commonly occurring upon elderly people, they are also found in the young. They are painless when not injured, and grow slowly, dropping off at times, when they have reached a considerable size, and leaving behind a shallow ulcer, from which the horn is again reproduced.

The treatment of cutaneous horns is simple. The growth is to be twisted or cut out, and the base lightly cauterized

with caustic potassa or chloride of zinc, to prevent its reproduction. The prognosis is usually favorable, but in elderly people epithelioma sometimes develops at the base of the horn. Hence, it is desirable to remove the growth and cauterize in every case.

Hydroa. The name at one time given to a group of symptoms now recognized as characteristic of herpes iris. (See *Herpes iris*.)

Hyperidrosis (i). Excessive sweating. It is a functional disorder of the sweat glands. The affection may be very slight, merely manifesting itself in a dampness of the skin, as in those persons who suffer from clamminess of the hands or feet; or it may show itself in the pouring forth of very large amounts. It may be acute or chronic, and it may be localized at certain points, as the palms or soles, which are the usual seat of the disease, or it may involve the whole body, as in pneumonia, tuberculosis, rheumatism, etc. Local hyperidrosis is often a disagreeable and stubborn disease. It usually occurs on the palms, soles, axillæ and genitalia, on one or both sides. Cases of unilateral sweating are occasionally recorded, and the disease may affect an entire half of the body. The quantity of sweat secreted when the perspiration occurs on the palms or soles is usually excessive; when affecting the former the sweat may at times drip from the ends of the fingers, when the hand is held down, as if it had just been dipped in water. The amount of sweat secreted at one time or another depends on various circumstances, as the condition of the patient, exercise, temperature, etc.

In a case of well-marked hyperidrosis the skin cannot be kept dry, and it usually presents a whitish or yellowish color and a soggy, water-logged appearance. When the soles are affected the stockings and shoes become moist, and the latter especially are soaked with the decomposing secretion, and are apt to smell very badly, rendering the patient annoying

to himself and disgusting to others. (See *Bromidrosis*.) Sometimes the epidermis of the sole peels off, and walking becomes difficult. The disease may last for years. When it occurs about the genitalia, erythema and intertrigo generally accompany it, and here the greasy, easily decomposable discharge is seen to be made up of sebum, as well as sweat, which, doubtless, is the same, to a less degree, in other localities.

The causes of hyperidrosis are often difficult or impossible to determine. In many cases it appears to be the result of some disturbance of the nervous system, debility or faulty innervation. It occurs at all ages and in both sexes; in the cleanly and among the dirty alike. It is apt to be worse in summer.

The treatment of hyperidrosis should usually be both general and local. If there be debility, tonics are called for. Iron, quinine, strychnia, ergot and the mineral acids are to be employed. Extract of belladonna, in $\frac{1}{4}$ to $\frac{1}{3}$ grain doses, solution of sulphate of atropia, $\frac{1}{200}$ to $\frac{1}{50}$ grain four times a day, until its full physiological effects are produced, and faradization may be employed, at one time or another, with hope of success. The cause should always be looked into, and if this can be ascertained, the treatment should, of course, be directed against this. I am inclined to think that, in some cases, malaria may be the exciting cause. When this is found to be the case, large doses of quinine, combined with fifteen-minim doses of dilute sulphuric acid, will prove useful. Every hygienic means, as diet, regimen, cold bathing, frictions, etc., should be brought into use. The treatment should generally begin by the administration of atropia or belladonna in doubtful cases. They always do good at first, and time is thus gained to investigate and examine into the cause of the malady, and to decide, perhaps, upon a less empirical plan of treatment.

Local treatment in hyperidrosis is particularly useful, and, in some cases, may alone be required. Patients are apt to use too much water, particularly warm water, in washing the parts too frequently. The parts affected should be washed as rarely as possible—only when they are really *dirty*. They should be *wiped*, however, from time to time, with a damp cloth, and immediately dried with a soft towel, without friction. Various dusting powders, as starch, lycopodium, magnesia and oxide of zinc, or the same with the addition of half a drachm of salicylic acid to the ounce may be used. They should be removed and renewed so soon as they become moist and caked. Chloral in powder, in the proportion of one drachm to one ounce of starch powder, is one of the most efficient of all these powders. They are ordinarily only serviceable in mild cases. Slight cases of hyperidrosis may also often be cured by the use of juniper tar, carbolic acid and sulphur soaps. Lotions containing alcohol, alone or with the addition of some astringent, will be found useful. The following is a convenient formula:—

R. Acidi Tannici..... ℥j
 Alcoholis..... f ℥ viij. M.
 SIG.—Use as a lotion.

Salt baths are sometimes found serviceable. Tincture of belladonna, diluted or in full strength, may be employed, its constitutional effects being guarded against. Weak solutions of chloral, permanganate of potassium, and salicylic acid, have been employed with success. In hyperidrosis of the palms and soles, washing with carbolic acid or juniper tar soap may be followed by the application of the following ointment, spread upon cloths, and kept in place with a bandage:—

R. Ung. Picis, U. S. P.
 Ung. Sulphuris, U. S. P... āā... ℥ ss. M.

In obstinate and severe cases, especially when the soles of the feet are affected, Hebra's treatment is the best. It is as follows: The parts having been cleansed with soap and water, the following ointment is applied:—

R. Emplast. Diachyli
Olei Olivæ.....āā..... ℥ iv. M.

The plaster is to be melted, and the oil added and stirred until a homogeneous mass results.

Pieces of muslin or cotton cloth are to be cut to the size of the parts, and the ointment spread on thickly and applied. Lint, smeared with the ointment, is also to be placed between the toes (or fingers), so that every portion of the skin may be completely covered with a layer of the ointment. The dressings are to be bound down closely, by means of a bandage. The cloths are to be changed twice in the twenty-four hours, when the parts are *not* to be washed, but simply rubbed dry with lint and a starch-dusting powder, after which new dressings are to be applied in exactly the same manner. This treatment is to be continued from one to several weeks, according to the severity of the case. Even when the disease is on the soles, the patient may be permitted to walk about in loose shoes. At the expiration of eight or ten days the parts are to be rubbed with the dusting powder and the dressings discontinued. The powder should be used for several weeks longer. Usually the sweating tends to lessen and gradually disappear after two or three weeks from the beginning of the treatment. A repetition of the course in severe cases is sometimes necessary before attaining a complete cure.

Of course, the patient must give up his occupation while undergoing this treatment—a sacrifice of time which is impossible in many cases. When, however, circumstances will permit, the treatment just described will succeed when milder measures, however faithfully applied, have failed.

The prognosis of hyperidrosis depends somewhat upon the state of the patient's health, the duration and locality of the disease and its extent. Many cases are easily cured, while others are extremely intractable. The ability of the patient to follow the treatment must also be considered, as careful attention to the directions given is almost essential to a cure.

Hyperæsthesia of the Skin (viii). Simple, augmented natural sensibility may be either general or local, diffused or circumscribed, unilateral or symmetrical. The temperature, as a rule, remains normal. The causes are varied, the condition being due either to some functional derangement of the nervous system, or to some organic disease connected with the nerve centres or trunks. Hysteria and allied states are well-known causes; also diseases of the brain, spinal cord and nerves. The sensation in the parts is unduly exalted, the patient experiencing discomfort from contact with the air, clothes, and other objects. The skin is often exquisitely sensitive to all impressions. In duration it may be permanent or temporary, according to the cause which has occasioned it (Duhring).

The treatment of hyperæsthesia and of its allied condition, dermatalgia, or pain in the skin, will depend upon whether it be idiopathic or symptomatic. Of course, the general tone of the system must be examined into with great care, and any aberration from the standard of health corrected, if possible. The idiopathic form gets well spontaneously, in many cases, after a few weeks. Local applications, however, may be demanded for acute symptoms. Blisters to the part, the galvanic current, and applications containing tincture of belladonna, of aconite root, or of iodine, and also the essential oils, as Japanese mint, oil of cloves, etc. Applications of very hot water are temporarily useful, also vapor baths, in general cutaneous pain.

Hypertrophy of the Skin (iv). (See *Callositas*, *Chloasma*, *Clavus*, *Cornu cutaneum*, *Dermatolysis*, *Elephantiasis*, *Ichthyosis*, *Keratosis pilaris*, *Lentigo*, *Molluscum epitheliale*, *Morphæa*, *Nævus pigmentosus*, *Scleroderma*, *Sclerema neonatorum*, *Verruca*.)

Hypertrophy of the Hair (iv). Hypertrophy of the hair or hirsuties, includes all those cases in which the hairs are unusually developed, as regards their size and number, either upon regions where the hair is ordinarily found, or in places where the hair is abnormal. In the works of Duhring, and other writers, will be found references to a number of cases of extreme length and abundance of hairy growth of the scalp and beard. When hairs, in excess, occur in connection with moles, the condition is termed *nævus pilosus*. *Trichiasis* is the abnormality of direction of the hairs. It may occur anywhere, but when found on the eyelids, the hairs turning inward sometimes give rise to great irritation of the ball. *Plica polonica* was formerly considered a hypertrophy of the hair, but it is not. (See *Plica polonica*.)

The removal of abnormal growths of hair occurring in normally hairless regions, is an operation requiring considerable skill. It is done by means of electrolysis, as first suggested by Michel and Hardaway, of St. Louis. The operation, as described by Hardaway, is performed as follows: A number thirteen cambric needle is attached to any convenient handle, which latter is connected to the negative wire of a galvanic battery; a moistened sponge electrode is connected with the positive pole. Under a strong lens, held in the left hand (or without this, if the operator has very good eyesight), the patient being seated in a reclining chair, facing a good light, the needle is entered, as near as possible, into the hair follicle; after this has been accomplished, and not till then, the patient is told to approach the sponge (positive) electrode to the palm of the hand. The needle is

not withdrawn until a slight frothing is observed around the stem, showing that the electrolytic action has been fully developed ; but to avoid shock, the sponge electrode is first released by the patient, the needle being removed subsequently, being exactly the reverse of the initial steps.

The hair should always be left *in situ*, and not extracted before the needle is introduced, as it is a guide for the introduction of the needle, the instrument being entered alongside of it. Besides this, it is an immediate guarantee of the success of the operation ; for if the hair comes away with the very gentlest traction of the depilating forceps, a point always to be tested at once, we know that the papilla has been destroyed ; but if force is required for its extraction, it is a sign that the follicle has not been properly entered. In this case the needle is re-introduced, or better, it is not removed at all, repeated attempts being made, from time to time, to withdraw the hair, until finally it is loosened. Eight cells of a freshly charged galvanic battery will usually suffice. A greater or less number, however, may be required in one case or another. The operation is a painful one, and but few hairs can usually be removed at a sitting.

The needle should be as fine as can be procured, even finer than a No. 13 cambric, if such is procurable ; and it must be remembered that the larger the needle, the longer it is retained *in situ*, and the stronger the battery power, the more rapidly and thoroughly can the hairs be removed. But if either of these conditions overstep the proper limits, abscesses and scars are apt to follow, and much unnecessary pain is caused. In any case, thirty or forty per cent. of the hairs remain (or appear to remain, for I think the growth of new hairs in the neighborhood is sometimes stimulated by the operation), and the operation must almost always be repeated once or several times. When carefully performed, not much scarring results, and I think most ladies who suffer

from the growth of a moustache or beard would prefer the scars.

All other methods of removing superfluous hairs are failures. Depilatories are temporary, vain and futile, besides occasionally injuring the skin.

Hypertrophy of the Nail (iv) may occur as an idiopathic affection, or it may appear in connection with certain general or constitutional disorders, as psoriasis, ichthyosis, syphilis and leprosy. When attended by a simple increase in the nail substance it has been called *onychauxis*. When, as is usually the case, the nail not only increases in size, but becomes discolored, rough and distorted, so as sometimes to look like a ram's horn, it has been called *onychogryphosis*. One, several, or all the nails may be affected, and the toes are more apt to suffer than the fingers. The excessive growth may be removed by bone forceps. I do not think that internal treatment can much affect hypertrophy of the nails.

Ichthyosis (iv). Ichthyosis is a congenital, chronic, hypertrophic disease, usually occupying the whole surface, characterized by dryness, harshness or scaliness of the skin, and a variable amount of papillary growth. Two varieties are generally described, I. simplex and I. hystrix. I think the latter a distinct affection, and have described it below. I am now understood to speak only of ichthyosis "simplex." The disease may be so mild in form as to amount to little more than a certain dryness and roughness of the skin. It may, on the other hand, be quite severe. As ordinarily met with, ichthyosis consists of an altered state of the skin, characterized by a harsh, dry condition of the whole surface, accompanied by the production of scales, sometimes firm and brawny; at other times coarser, and shaped after the lines and furrows of the skin. The latter, from their resemblance to fish scales, have given occasion to the name of the disease,

“ichthyosis,” or the “fish-skin” disease. The amount of scales depends upon the age of the patient, the severity of the disease, and the efficiency of any treatment which may have been employed. The scales, if not removed by bathing, often tend to accumulate. They are usually whitish, grayish or yellowish in color, with sometimes a glistening look. Sometimes the general color of the eruption is of a more or less yellowish or dark olive green. Even when the disease is not severe, it gives the surface an unwashed look.

The localities in which ichthyosis is developed to the most marked degree are the lower extremities, from the hips to the ankles, and the arms and forearms. The skin of the backs of the hands and the face very often has a peculiar, smooth-drawn, parchment-like appearance, which is very characteristic. Sensible perspiration is, in most cases, absent, excepting in the face, axillæ, palms and soles. There is sometimes marked hyperidrosis in the two last. The disease is worse in winter than in summer; in fact, it is apt to almost disappear during the latter season. The course of the disease is essentially chronic. Beginning to show itself distinctly during early childhood, it grows more and more marked with each year of the patient's life. It sometimes appears to be hereditary, but no distinct and invariable hereditary influence seems to prevail in all cases. Ichthyotic parents usually beget healthy children. The patient himself generally enjoys fair or good health. The disease occurs in all races, both sexes, and in every grade of society.

The diagnosis of ichthyosis is usually not difficult. The history alone differs from that of all other skin diseases, its chronicity offering a marked contrast to the rapidly developing character of the acute inflammatory disorders.

External treatment alone is of any avail in ichthyosis. No medicine as yet brought forward has influenced the condition of the skin in this disease. Therefore, time,

money, and the patient's stomach, will be saved, if arsenic, cod-liver oil, and what not, be discarded from the beginning. The skin is to be kept moist and supple by the frequent administration of warm baths with alkalies or soap. Vapor baths are also useful. Inunctions of some emollient material should always be practiced after the bath. In well-marked and severe cases, the soap treatment will be found valuable, to remove some of the dry and horny epidermis, and prepare the way for the application of emollients. A sufficient quantity of *sapo viridis* is to be rubbed into the skin twice, daily, for four or six days, during which period the patient is to refrain from bathing. A bath is first to be taken, four or five days after the last rubbing, when, in fact, the epidermis has begun to peel off; afterwards, inunction with a simple ointment is to be practiced, in order to prevent fissuring of the new skin. For this purpose, oil of sweet almonds, glycerine, pure or diluted, with one to seven parts of water, or one of the following ointments may be used:—

℞. *Adipis Benzoatæ*..... ℥ iv
Ung. Petrolii..... ℥ j
Glycerinæ..... ℥ iv. M.

Or,

℞. *Potassii Iodidi*..... ℥ j
Ol. Pedis Bubuli,
Adipis..... āā..... ℥ ss
Glycerinæ..... f℥ j. M.

I have used the latter formula with satisfaction in a number of cases, while I must confess ignorance as to the part played by the iodide of potassium.

The prognosis of ichthyosis is entirely unfavorable as regards permanent cure, but alleviation of the symptoms may be brought about very satisfactorily. The affection should really be regarded as a deformity rather than a disease, though it predisposes strongly to the occurrence of eczema, particularly of the hands.

Ichthyosis Hystrix (iv) is characterized by the formation of irregularly shaped and sized, ill-defined, rough, harsh, yellowish, brownish or greenish patches, made up of enormously hypertrophied, more or less horny papillæ. Unlike the ordinary form of ichthyosis, this is apt to be localized, and rarely covers the surface to any extent. It is sometimes distributed in the line of the nerves. Sometimes the papillæ are so hypertrophied as to stand out like porcupine quills—hence the name “hystrix.”

The treatment of ichthyosis hystrix is essentially that of any warty or horny, non-malignant growth. The patch, if not too large, may be poulticed until softened, and then attacked by caustic potassa, or glacial, acetic, or chromic acid; or it may be removed by the knife. In one case considerable improvement was gained by painting the surface, twice daily, with the following:—

R. Acidi Salicylici..... ʒss
 Ext. Cannabis Ind..... gr. x
 Collodii..... ʒj. M.

Another preparation which has been used with good effect is the fluid extract of *Thuja occidentalis*, painted on in the same way.

Impetigo (ii) is an acute inflammatory disease, characterized by the appearance of one or more pea- or finger-nail sized, discrete, rounded and elevated, firm pustules, unattended, as a rule, by itching. The eruption is occasionally, but not often, attended by slight constitutional symptoms, as loss of appetite, constipation and malaise. The pustules come out one or two at a time, and are discrete and scattered, never tending to coalesce. They are tense, raised, semi-globular, of a whitish-yellow color, and at first surrounded by an areola, but with little infiltration. In number they may vary from one to a dozen, or more. They may occur upon any part of the body, but are common upon the face, hands, feet,

toes and lower extremities ; also, upon the palms and soles. Commonly they itch or burn little or not at all. The disease may last several weeks, the lesions coming out rapidly one after another at first, lasting a day or two in a typical condition, and then becoming darker or bloody, drying, crusting and becoming absorbed. The fluid contents of the pustules, where these are ruptured by accident or design, are seen to be thinner than would appear from the firm aspect of the unruptured pustule. The crusts may be abundant, and of a yellowish or brownish color, or they may be insignificant, the pustule being absorbed. In no case does a permanent scar remain. The disease tends to a speedy recovery. Relapses are not common.

Impetigo occurs in healthy, well nourished people. Its exact etiology has not been ascertained, but it is not connected with debility, want of proper nourishment, or derangement of the digestive system. In adults it occurs about the fingers and hands, but it is not so common among grown-up people as among children. It is not contagious.

Impetigo is to be distinguished from eczema, impetigo contagiosa, and ecthyma. From eczema it is distinguished by the superior size and development of the pustules, their small number and separate arrangement. In addition, the pustules of impetigo do not incline to rupture, and there is rarely a crusted discharge. The opposite in all these respects is found to occur in eczema. In addition, eczema is invariably accompanied by infiltration and by itching, neither of which are present in impetigo. In impetigo contagiosa, which must not be looked upon as a variety of impetigo, but as a distinct disease, the affection begins by a vesicle or vesico-pustule like that of vaccinia, the crust is flat, sometimes umbilicated, without any infiltration about its base ; and above all, there is a history of contagion. None of these characters are found in impetigo. Impetigo is often con-

founded with ecthyma, but in the latter affection the pustules are flat, and are surrounded by an extensive, inflammatory, hard base; in impetigo they are elevated and rounded, and have generally but a slight areola. In ecthyma the crusts are blackish or brownish in color, are large and flat, and are seated on a deep excoriation. Impetigo usually occurs in the strong and healthy; ecthyma in the weakly and cachectic.

The treatment of impetigo is simple. The pustules may be opened as they mature, and the contents allowed to escape. The part should be protected from rubbing and violence. The lesions may be dressed with the following ointment:—

R. Bismuthi Subnitrat..... ʒ ss-j
 Ung. Aquæ Rosæ..... ʒ j. M.

This ointment is to be spread thickly on bits of cloth, applied to the lesions and covered with waxed paper. It is then to be bandaged on to the parts, and retained in apposition with occasional renewals, until the lesions have healed up under the crust.

Internal treatment is not required.

Impetigo Contagiosa (ii) is an acute, inflammatory, contagious disease, characterized by the formation of one or more superficial, discrete, roundish or ovalish, vesico-pustules or blebs, the size of a split pea or finger nail, which pass into crusts. The eruption is commoner among infants and young children. Isolated, flat, or slightly raised vesicles are first seen, small in size at the beginning, but rapidly spreading on the periphery until they become like little blebs, with a thin, withered-looking, collapsed wall. The lesions are few in number. Usually they are discrete, but sometimes two or more coalesce. They are most commonly found about the mouth, on the chin and nose, and on the hands. Crusts form in a few days, usually yellowish or straw-colored, and, as they dry, loosening at the edges, so as often to look as if

they had been stuck on the skin. The surface beneath is moist and excoriated. The mucous membranes of the mouth and conjunctiva are occasionally invaded. The disease may extend from place to place by auto-inoculation. It runs its course in about ten days, tending to a spontaneous recovery. Sometimes, however, it runs an anomalous course.

Impetigo contagiosa is ordinarily a disease of the lower classes, and its spread is favored by want of cleanliness. It is almost exclusively confined to children. The disease is contagious and auto-inoculable. It appears sometimes to occur in the form of an epidemic, and is commoner in summer. The affection has been supposed to be due to a vegetable fungus, but thus far the evidence of observers has been uncertain and conflicting. Stelwagon, whose opportunities of observation of the disease have been greater than those of any previous writer on the subject, does not consider the disease to be due to a parasite, nor related in any way to vaccination. He believes it to be an acute, contagious, systemic disease (exanthem), with cutaneous manifestations, having a definite course, and, in all probability, due to a specific poison.

Impetigo contagiosa is to be distinguished from eczema pustulosum and from impetigo; the history, character and course of the lesions will settle the question. From varicella, pemphigus and herpes iris, the appearance and distribution of the lesions will distinguish the affection.

The treatment of impetigo contagiosa is simple. An ointment of ten grains of ammoniated mercury to the ounce is as good a dressing for the lesions as is necessary, and this, with cleanliness, will suffice for a rapid cure.

Impetigo Herpetiformis. (See *Dermatitis herpetiformis*.)

Infantile Syphilis. (See *Syphilis, skin diseases in infants*.)

Intertrigo. (See *Erythema intertrigo*.)

Iodine Eruptions. (See *Dermatitis medicamentosa*.)

Itch—Army Itch. (See *Scabies*.)

Keloid (vi). Keloid is a connective-tissue new growth, characterized by one or more irregularly-shaped, variously-sized, elevated, smooth, firm, somewhat elastic, pale-reddish, cicatriciform lesions.

The disease usually begins as a small, pea-sized nodule, increases slowly in size and commonly assumes an ovalish, elongated or crab-shaped form, or may occur in streaks or lines. The lesion varies greatly in shape, and may be quite small or as large as the palm. The outline is well-defined, and the surface contour rounded and highest in the centre. Taken between the fingers it has a firm, dense, slightly elastic feel. Its surface is smooth, shining and generally devoid of hair, and its color reddish or pinkish. The lesion is usually single, though several may exist simultaneously. It is more common over the sternum, but it is also met with on the mammæ, neck, ears, arms and elsewhere. It is sometimes painful, especially on pressure, and occasionally, but rarely, it itches. The course of the disease may be rapid or slow; having attained a certain growth it is apt to be stationary, and may remain a lifetime, though it generally disappears spontaneously.

Keloid, it is said, may arise spontaneously. It usually, however, springs up at the site of various injuries of the skin, when it is called cicatricial keloid. This variety is often met with as the result of burns by fire or chemicals, cuts, flogging and wounds of all kinds. It is sometimes found in the lobe of the ear after piercing for ear-rings, in the scars of leech bites, or of acne lesions, and I have seen it abundantly developed in the scars of non-parasitic sycosis and of syphilis. I think that in these last instances the keloid lesions tend to disappear rather more rapidly than in other forms. Keloid is commoner in the colored race. No cause can be ascribed for the "spontaneous" form of keloid, and I do not believe such a

variety exists ; each lesion of keloid grows in some previously existing scar, which, however, may have been so minute as to have escaped notice.

Keloid is a connective-tissue new growth. Under the microscope the lesions are seen to be made up of a dense, fibrous mass of tissue, whitish in color and composed of compact bundles of connective tissue, having their seat in the corium.

The symptoms of keloid are so striking that no difficulty need be experienced in making a diagnosis. It is most liable to be mistaken for simple cicatrix, from which it may be distinguished by its color, outline, elevation and consistence, and, frequently, by the presence of pain.

The treatment of keloid is rarely satisfactory. When operated upon by the knife or caustic it is apt to return, and frequently in an aggravated form. Caustic potassa is the best caustic to use, but the growth should never be touched while it is still making progress, or certain disappointment will be the result. Hypodermic injections of morphia are occasionally required to allay the pain. Chloroform and anodyne liniments may also be prescribed for the same purpose, and I have used the fluid extract of hamamelis with benefit. Wilson recommends painting the growth with a solution containing one drachm of iodide of potassium, an ounce of soft soap and an equal quantity of alcohol ; followed by the application of lead plaster spread on a piece of soft leather, the dressing being kept on a week and then replaced by another.

The prognosis of keloid is not very favorable as to disappearance. The utmost that can be said in any given case is that it *may* disappear either spontaneously or under the use of supposed remedies after a time. Its course is usually progressive, with occasional temporary arrest of development. Very often, however, the lesions may remain stationary for years.

Keloid of Addison. (See *Morphæa*.)

Keratosis Pigmentosa. (See *Verruca senilis*.)

Keratosis Pilaris (iv) is somewhat akin to ichthyosis. It is characterized by the formation of pin-head sized, conical, whitish, epidermic elevations, seated about the apertures of the hair follicles, chiefly those of the outer aspect of the thighs and of the arms near the shoulders. It looks not unlike "goose flesh." The treatment is in general the same as that of ichthyosis, but the prognosis is more favorable. Daily rubbings with *sapo viridis*, followed by an emollient ointment, are usually useful.

Lentigo (iv), or freckles, though a common affection, is so unimportant as to demand only a passing notice. Their ordinary seat is upon the face, but they may occur in any part of the body. They are rarely seen before the third year, and tend to disappear spontaneously in older persons. Freckles of an intense dark-brownish or blackish color are met with as one of the symptoms in the rare disease known as "xeroderma of Hebra." (See *Atrophy of the Skin*.) The remedies employed in lentigo are the same as those used in chloasma. (See *Chloasma*.)

Lepra. Lepra is an endemic, chronic, malignant, constitutional disease, characterized by alterations in the cutaneous nerve and bone structures, resulting in anæsthesia, ulceration, necrosis, general atrophy and deformity. Leprosy is a constitutional disease and involves the whole organism most profoundly. Its invasion is slow and insidious. Premonitory symptoms of malaise, mental depression, languor, sleepiness, loss of appetite, nausea, chills, repeated attacks of fever, general debility, nervous prostration and pains in the bones are usually present and may last for weeks, months or years, without other symptoms. Sooner or later, however, the more characteristic features of the disease, the bullous, macular, pigmentary or tubercular skin lesions, make their appearance.

These may appear separately, successively or together. Sometimes the skin lesions are prominent symptoms of the disease; at other times they are subordinate. Other organs of the body, as the nerves, are also affected.

Two forms of leprosy are recognized, the tubercular and the anæsthetic. No absolute line, however, separates them; they often appear simultaneously upon different parts of the body, and one may pass into the other. The tubercular variety is characterized by the formation of masses of infiltration and tubercles. Other lesions are also found. An eruption of pemphigus-like blebs, showing themselves irregularly for some time before the appearance of other lesions, is one of the earliest symptoms, though it is said these more frequently precede the macular variety of leprosy than the tubercular. Macules now make their appearance as smooth, shining, erythematous patches, usually defined infiltrated, not commonly raised above the level of the skin, yellowish or reddish in color, and growing dusky yellow and brownish, as they grow older. Sometimes they are paler, and look like a piece of cut raw bacon set into the skin. They are commonly surrounded by a pinkish or lilac border of small blood vessels. The sensibility of the skin is altered from the beginning, the patches being at first hyperæsthetic, and later anæsthetic. They may appear anywhere on the body, but most commonly upon the trunk and extensor surfaces of the extremities. Sometimes they are present in such numbers as to involve a considerable area of the body. They may disappear and reappear from time to time, or they may remain as permanent lesions, in which case they increase in size.

Sooner or later the disease shows itself in the form of variously-shaped and sized nodules and tubercles, situated in the skin and subcutaneous tissues, which may develop into roundish, irregularly-shaped prominences and elevated masses, from cherry to walnut size, or larger, conspicuous and promi-

nent, or slightly raised, and having a yellowish-brownish or bronze color. They are more or less painful when pressed upon. They are usually found upon the face; and chiefly the forehead, eyebrows, cheeks, nose, lips, chin and ears are apt to be invaded, giving rise to deformity, often of a hideous character. Later, the mucous membrane of the mouth, pharynx, epiglottis, larynx and nares are attacked; the eye also suffers. Besides the face, other portions of the body, notably the trunks, buttocks, arms and legs, fingers and toes, are invaded. The course of the tubercle varies; it may last a long time without change, or it may soften and ulcerate at once, or it may be absorbed. Ulceration is apt to occur about the fingers and toes, the ulcers being covered with adherent brownish crusts.

The anæsthetic variety of leprosy may occur in conjunction with the tubercular variety, or alone, in which case it is characterized by the presence of a number of symptoms in addition to the anæsthesia. Blebs are apt to appear, first coming out in an irregular manner, from time to time, and being followed by pigmentation, and, after a longer or shorter time, by anæsthesia about the seats of the former lesions. In other cases, macules, like those which sometimes precede the tubercular form, come first. Hyperæsthesia of the skin sometimes occurs, with pains and burning sensations, followed by anæsthesia affecting a limited portion or the greater part of the surface. Later, the skin becomes atrophic, dry, yellowish or brownish in color, or more or less wrinkled.

Following this alteration in the structure of the skin, the subcutaneous tissues and muscles undergo atrophy, giving rise to deformity, especially of the fingers and toes; the hairs and nails become altered in structure or are shed; the hands and feet become greatly mutilated; the fingers and toes bent, crooked and contracted. Sooner or later the bones are attacked, causing destruction of the joints and of the bones

themselves ; the skin over the joints becomes excoriated and ulcerated ; the ends of the bones undergo disintegration, and the phalanges, finally, either become absorbed or drop off. Even the hands and feet may gradually be lost ; the extremities become more or less completely anæsthetic, and are greatly wasted, at times, to half their former size.

The causes of leprosy still remain obscure. It is endemic in Africa, along the shores of the Mediterranean, and of the Atlantic and Indian Oceans, as well as in the interior of the country ; also in Asia Minor, Arabia, Persia, India, China, Japan, Kamtschatka, the various islands of the Pacific Ocean and Australia. In Europe, it is found in Norway, Southern Spain, Sicily, Greece, and Southern Russia. Upon the Western Hemisphere, it occurs in Mexico, Central America, the Islands of the West Indies, along the coast of South America, and especially in Brazil ; it also exists in Iceland. Within the past few years, cases of undoubted authenticity have been reported as occurring among natives of the United States, who have never been out of the country.

Leprosy is in many instances hereditary, and may be conveyed from parent to child through a series of generations. Concerning its contagiousness opinions differ, and although the weight of testimony seems in favor of its contagious nature, the matter cannot as yet be said to be definitely settled. The most potent causes in the production of the disease appear to be connected with climate, state of the soil, food, and habits of the people. The disease usually occurs among the lowest classes, but it may attack those in the most favored circumstances. It occurs in both sexes, and at any period of life.

The diagnosis of leprosy, in countries where the disease is endemic, is usually easily made. The earliest premonitory symptoms arouse suspicion, which the appearance of the cutaneous manifestations places beyond doubt. When the

disease occurs sporadically, in countries where it is not endemic, it may, however, be mistaken for other affections.

The macular and tubercular varieties are apt to be mistaken for syphilis. The lesions of leprosy, however, are larger and more irregular in size and distribution. The pigmentation of leprosy is of a peculiar yellowish or brownish tint. The lesions have a smooth, glazed appearance. The tubercles are apt to be much larger than those of syphilis, being often hazel-nut or walnut-sized, and are darker in color; their course is usually slower than that of syphilitic tubercles. The general expression of the face (the usual seat of the tubercles in leprosy), is much changed, the features having an ugly, leonine appearance.

Later, when the tubercles break down into ulcers, the blackish, adherent crusts which cover them are seen to be less bulky than those observed in syphilis. With ulceration come other very marked features of the disease, as anæsthesia, distortion of the hands and feet, absorption of bone tissue, and atrophy, all unmistakably characteristic.

The yellowish, roundish patches of macular leprosy should not be mistaken for vitiligo, although this may readily occur in the early stages of the disease. The health in vitiligo is generally good, and the decolorized patch of disease consists of simple absence of pigment, with usually a border of increased amount of coloring matter. The skin is normal in texture. In leprosy, on the other hand, the macules are infiltrated with a lardaceous-looking substance, of firm consistence, and are generally anæsthetic or hyperæsthetic.

Morphœa, which is an affection of an entirely different nature (see *Morphœa*), presents lardaceous-looking patches, somewhat resembling those of macular leprosy. But the general health in morphœa is good, and the patches show normal sensibility, and tend to spontaneous recovery.

The treatment of leprosy has thus far proved very unsatis-

factory. As in the case of most diseases refractory to treatment, the remedies and pretended cures have been exceedingly numerous, but as they have failed for the most part, they need not be mentioned here. The remedies now employed are valuable in improving the general condition of the leper. Change of climate and residence, usually to a temperate and bracing atmosphere, is imperative. Strict hygienic rules should be adopted, including exercise and bathing, with the most nourishing food. Quinine and strychnia are important as tonics, and the usual alteratives may also be employed. Symptoms are to be treated as they arise.

Local treatment is valuable. Baths, plain or medicated with iron or sulphur are said to be of service.(?) Of recent remedies, the oil of cashew nut, gurjon oil and chaulmoogra oil, internally and in the form of inunctions, are recommended, on good authority. The formula for the use of gurjon oil is as follows:—

R. Ol. Gurjon..... ℥j
 Aquæ Calcis..... ℥iij. M.

Churn well together, to make a cream. Apply to ulcers.

Cashew-nut oil is applied, pure or diluted with almond oil, to the anæsthetic patches, being rubbed in until it nearly blisters. I think one part of the cashew-nut oil to three of the almond oil is strong enough to begin with, and as much friction, short of actual blistering or abrasion of the skin, should be used, as the patient can bear. The oil of cashew-nut should also be applied, pure, to the tubercles until they open, and then the sores may be dressed with gurjon oil, as above.

The prognosis of leprosy is unfavorable. A few cases of cure have been reported, when the patient has been placed upon energetic treatment from the earliest appearance of the disease. In the anæsthetic form of the disease the prognosis is more favorable. Patients need not be isolated unless there

are open sores. I cannot believe the anæsthetic form contagious.

Leprosy. (See *Lepra*.)

Leucoderma. (Congenital, see *Albinism*; acquired, see *Vitiligo*.)

Lice. (See *Pediculosis*.)

Lichen Pilaris. (See *Keratosis pilaris*.)

Lichen Planus. (See *Lichen ruber*.)

Lichen ruber (ii). Lichen ruber is an inflammatory disease, characterized by pin-head or pea-sized, flat and angular, or acuminate, smooth and shining, or scaly, deep red, discrete or confluent, papules, running a chronic course, and attended by more or less itching.

The acuminate form is rare. The angular form, lichen ruber planus, is that commonly met with, the papules varying in size from a pin head to a split pea; often they coalesce and form patches. The shape of the papules is peculiar and characteristic; they are seldom round, as most papules, but are, instead, quadrangular or polygonal in form. They rise abruptly from the skin to the sixteenth of an inch or less, are flattened on the summit, and show a minute umbilication with whitish puncta. To the touch, they are firm, smooth, and without scales, excepting in those cases where the disease runs into a papulo-squamous stage. They are glazed, and of a peculiar dusky, crimson, or even violaceous tint. Usually discrete, the lesions are sometimes aggregated, so as to form sheets of raised and infiltrated lesions.

The diffused form of the disease is rarely seen in this country. It is made up of large patches of acuminate lesions. Itching is generally present in both varieties of the disease. It is usually moderate, but may at times be severe. The commonest locality of lichen ruber planus is on the fore-arms, especially upon the flexor surfaces of the wrists. It occurs also on the palms and soles, and on the penis. It is

apt to be symmetrical, and the lesions are sometimes arranged in rows. The course of the disease varies; in some cases, under careful treatment, a cure can be effected in a few weeks or months, while other cases run an exceedingly chronic course, even extending to years. Persistent, dark brown or violaceous stains succeed the lesions. The severer forms are said to run a graver course, and to end sometimes in marasmus and death.

The cause of lichen ruber is generally to be found in exhaustion, nervous debility and depression, overwork and improper diet, leading to impoverished nutrition.

Lichen ruber may be mistaken for the papular syphiloderm, which it closely resembles, especially in the coppery or ham color of the lesions. In the variety *L. planus*, however, the peculiar shape and contour of the lesions, with their smooth, umbilicated or punctate surfaces, will serve to distinguish them. Eczema papulosum, which often resembles lichen ruber, differs, in that the papules are roundish, somewhat acuminate, bright red in color, and intensely itchy. Their evolution also is different.

The internal treatment of lichen ruber should be chiefly tonic and supporting. Arsenic is of high value, and is, in fact, almost a specific. The dose at first, two to four minims of Fowler's solution, in a fluid drachm of wine of iron, should be increased almost to the limit of tolerance, and persisted in. Arsenic may also be administered hypodermically, using one part of Fowler's solution and five parts of water, beginning with four or five minims of the mixture. The preparations of iron and cod-liver oil are also useful. Treatment should be instituted early in the course of the disease. Cases of long standing are very stubborn, even to the best directed treatment, which, earlier given, might have proved effectual.

Locally, simple ointments, as vaseline or cold cream, may be employed when itching is not present. When the eruption

itches, alkaline baths, carbolic acid washes or ointment, dilute hydrocyanic acid, with water, diluted liquor picis alkalinus, made thus—

R.	Potassæ Caustic.....	gr. xv	
	Picis Liquidæ.....	gr. xxx	
	Aquæ.....	f ʒ iv.	M.

may be employed.

The following ointment is a useful one:—

R.	Olei Rusci Crudi (Vel. Ol.		
	Betulæ).....	ʒ j	
	Ung. Aquæ Rosæ.....	ʒ j	
	Ol. Rosæ.....	℥ xx.	M.

In addition to these the more stimulating and stronger anti-pruritic remedies mentioned under the head of eczema may be employed, with the hope of reducing the pruritus and bringing about absorption of the lesions. In the acuminate form of lichen ruber the following ointment has proved of high value:—

R.	Hydrarg. Bichlor.....	gr. ij	
	Acidi Carbolicæ.....	gr. x	
	Ung. Zinci Oxidi.....	ʒ j.	M.

The prognosis of lichen ruber will depend upon the extent of the eruption, its duration, and the patient's general condition. Localized eruptions on the wrists and forearms, occurring in persons of average health, do not usually require a very lengthened course of treatment for their cure. When, however, the eruption is extensive and severe, and has lasted a long while, the prognosis is much less favorable.

Lichen Scrofulosus (ii) is a very rare disease in this country, and is characterized by the appearance of pin-head-sized papular lesions, of a reddish color, and tending to form in groups over the chest, back and abdomen. It resembles papular eczema, but does not itch. It occurs in scrofulous

young persons about the age of puberty. The disease always yields to treatment. Cod-liver oil, internally and externally, cures it.

Lichen Simplex was the name formerly given to papular eczema. (See *Eczema*.)

Lichen Tropicus. (See *Miliaria*.)

Lineæ Albicantes. (See "*Striæ et Maculæ Atrophicæ*," under the head of *Atrophy of the skin*.)

Lip, Fissured. (See *Eczema of lip*.)

Liver Spots are either discolorations of the skin (see *Chloasma*, *Lentigo*), or are due to a local parasitic disease (see *Tinea versicolor*).

Louse. (See *Pediculosis*.) Body l., *P. corporis*. Head l., *P. capitis*. Crab l., *P. pubis*.

Lupus Erythematosus (vi). Lupus erythematosus is a cellular new growth, characterized by one or more circumscribed, roundish or irregularly-shaped, variously-sized, reddish patches, covered with grayish or yellowish, adherent scales. The disease usually begins in the form of one or more roundish, pin-head to small pea-sized, erythematous patches, which enlarge upon their periphery, and often coalesce to form larger, irregularly-shaped patches. After a time the patches increase in thickness, and show more infiltration, and when fully developed there may be a number of patches, varying in size from a split pea to a silver dollar, or the palm of the hand, having usually a distinct and clear cut marginal outline. In color they are reddish or violaceous, and are invariably covered with fine or coarse, grayish or yellowish, remarkably adherent scales, at times scanty, at other times forming sebaceous-looking crusts, like those found in seborrhœa of the face. They are firmly attached to the openings of the sebaceous glands, which are often plugged up with sebum, or denuded and patulous. The patch spreads on its margin, which is usually higher than the centre, the latter

being commonly paler, and often showing atrophic depression. After a variable time the patch attains a certain size, and may remain stationary. There is never any moisture or discharge in connection with the disease.

Lupus erythematosus is usually found upon the face, one or both cheeks, below the eyes, and the bridge of the nose, being the commonest seat of the affection. Often both of these localities are attacked by the disease, which forms the rude figure of a butterfly with outstretched wings. The muco-cutaneous and mucous surface of the lips, the ears, scalp, back, and other parts of the body may be attacked. Lupus erythematosus is remarkable for its chronicity, and may persist through life. It tends to increase, from time to time, by repeated attacks. Ultimately, the process generally ends in the formation of a superficial or deep-seated cicatricial tissue.

The subjective symptoms vary in different cases, depending somewhat upon the activity of the disease. At times there is much burning and itching, while in other cases there may be no subjective symptoms.

The causes are obscure, although it is apt to occur in persons of a scrofulous tendency. Females are more liable to it than males, and light than dark-haired persons, and it occurs notably on those who are subject to disorders of the sebaceous glands, sometimes, indeed, appearing to originate in a patch of localized seborrhœa.

When fully developed, the typical patch of lupus erythematosus offers such a striking picture, with its reddish or violaceous color, its sharply circumscribed outline, its infiltrated surface, studded with plugged-up or gaping sebaceous openings and covered with adherent sebaceous scales, and its place of election, the nose and cheeks, that it can scarcely be mistaken for any other disease. It is to be distinguished from lupus vulgaris by the absence of papules, tubercles and ulcer-

ation. The sebaceous glands are not affected in lupus vulgaris. Lupus erythematosus rarely begins before puberty; lupus vulgaris usually begins in childhood. Lupus vulgaris is a deep-seated disease, and is attended, sooner or later, with ulceration and disfiguring cicatrices; lupus erythematosus is comparatively superficial. Psoriasis sometimes resembles lupus erythematosus very closely, but may be distinguished by its course and by the various symptoms peculiar to it. Syphilis sometimes resembles lupus erythematosus superficially, but its history is very different.

The results of treatment in lupus erythematosus are extremely varied. At one time the therapeutic measures employed will prove rapidly and easily successful, while in another apparently equally light case every known method of treatment may be exhausted without producing more than a temporary effect on the course of the disease. Internal remedies are called for in some cases. They are to be selected to meet the especial indications which may be manifested. Iodine, arsenic, iodide of potassium and cod-liver oil may, one or another, often be employed with advantage. Hygienic measures, chiefly nourishing diet, fresh air and sea bathing, are important.

The external treatment is that which will usually be found most available and of the greatest value. In the milder forms of the disease it is to be remembered that patches often disappear without leaving a scar. Care must be taken, therefore, not to make matters worse than they would naturally turn out. No strong caustics are to be used in such cases. Stimulating applications may be first tried. The following mild stimulant is useful when the patches are more erythema-like in appearance, recent, spreading and superficial, with little infiltration and no involvement of the sebaceous glands:—

℞. Zinci Sulphat.,
 Potassii Sulphuretāā..... ℥ ss
 Aquæ Rosæ..... f ℥ iiiss
 Alcoholis..... f ℥ iij. M.

If this is too strong it may be diluted, but if it agrees, the first two ingredients may be increased in quantity to one drachm.

A somewhat stronger stimulant, but one useful in the form of lupus erythematosus just described, as well as in cases where there is more infiltration, is the following:—

℞. Chrysarobin ℥ iiss
 Acidi Salicylici,
 Pulv. Calaminis.....āā..... ℥ ss
 Ætheris ℥ j
 Collodii Flexile..... ℥ v. M.

Sapo viridis is also a good stimulant application, relieving the disease by itself alone, when used in mild cases. It may be applied spread upon cloth in the form of a plaster, or rubbed in with water.

Dissolved in one-half its weight of alcohol, it forms the “spiritus saponis kalinus,” of even more value as an outward application. The patches are to be well scrubbed with the spirit, until any scales that may be present are removed, when it may be washed off with water, and some mild ointment applied. Mercurial ointment is useful in some cases, prepared as a plaster, and applied continuously. Sulphur may sometimes prove serviceable applied in the form of an ointment, a drachm or more to the ounce. Pyrogallic acid has been used with success in the form of an ointment, a scruple to a drachm to the ounce. Stronger and even caustic applications are demanded in some cases, but they should never be used until the weaker ones have been tried. A solution of caustic potassa, one part to three or six of water, is one of the best of these. It may be applied by means of

a charpie brush upon a stick. Fuming nitric acid may also be used; it is less painful than the potash. The galvanocautery has sometimes been used with success, as also has the curette or scraping spoon, but in cases demanding, from their extent and infiltration, such strong measures, the practice of linear scarification is better than any of the caustics, or other strong remedies just mentioned. This may be carried out by using a fine scalpel or tenotome, holding it in the hand like a pen, and making a series of parallel incisions about one-sixteenth of an inch apart, and extending entirely through the skin. Having covered the patch to be operated upon with a series of incisions running in one direction, a fresh series, perpendicular to the first, should follow, and even a third series may be practiced, until the diseased skin is fairly hashed up by the knife. Excepting in persons of particularly tough fibre, it will be necessary to freeze the skin, with a little bag of ice and salt, or by means of ether or rhigolene spray, before operating. Bleeding may be checked at once by the application of absorbent cotton with pressure. Successive patches of a square inch, more or less, may be operated on daily, until the entire surface has been covered. When the wounds are healed, which will be very soon, the operation can be repeated on any patches that may have escaped. Scarification thus accomplished leaves little scar, and gives more satisfactory results than any other treatment.

Lupus Exedens, a name given in former times to a rapidly eroding, ulcerative disease of the face, usually infiltrating epithelioma, rodent ulcer or syphilis. (See *Epithelioma*, *Ulcer rodent*, *Syphilis of the skin*—ulcerative), rarely true lupus.

Lupus Vulgaris (vi). *Lupus vulgaris* is a cellular new growth, characterized by variously-sized and shaped, reddish or brownish patches, consisting of papules, tubercles or flat infiltrations, usually terminating in ulceration and cicatrices.

The disease varies in appearance in different cases, and also according to the locality attacked and the stage of its development. It usually begins by the formation of small, yellowish-red or brown points under the skin, which increase in size, coalesce and form irregularly-shaped, roundish or ser-piginous, ill-defined patches of various size. The points referred to enlarge until they form papules, and finally tubercles. It is at this stage that the disease usually comes under notice. The lesions are of all sizes, from a pin's head to a split pea, are brownish- or yellowish-red in color, and are covered with a thin layer of imperfectly-formed epidermis. They are firm or soft, and are painless. At this stage of development the disease may retrograde and terminate in absorption of the lesions, leaving a thin, desquamative, cicatricial tissue, or it may go on to ulceration and complete destruction of the infiltrated skin, resulting in much disfigurement. In its earlier stages lupus vulgaris is rarely attended with any subjective symptoms, but later there is sometimes pain. The commonest seat of the disease is about the face, especially the nose, cheeks and ears. It frequently attacks the extremities, especially the fingers, where it may result in serious deformity. The limbs and trunk may also be involved. Lupus vulgaris is a destructive disease, often resulting in serious disfigurement. It spares none of the external tissues, and may invade the mouth, cartilages of the nose, ear, larynx, and even the eye.

The disease usually originates in childhood. It is never congenital. It is rarely, if ever, hereditary. It is much commoner on the continent of Europe than in Great Britain, and is very rare among natives of the United States. I do not remember to have met with a lupus patient who was born in this country, though I cannot say that it never attacks the native American. It is a disease of the lower classes, not commonly attacking the well-nourished, but usually the debilitated and ill-fed.

The diagnosis of lupus vulgaris from syphilis, the disease with which it is most likely to be confounded, is chiefly to be made by the history of the case in question. In addition, the ulcers of lupus are comparatively superficial; those of syphilis ordinarily deep, and often have an excavated appearance. The ulcer of lupus is commonly less extensive than that of syphilis. In lupus there are, as a rule, a number of points of ulceration which tend to become confluent; whereas, the ulcers of syphilis usually remain distinct. The border of the syphilitic ulcer is sharply defined; that of lupus is not apt to be so. The secretion of the syphilitic ulcer is apt to be copious and offensive; that of lupus is scanty and inodorous. The crusts of lupus are thin and brownish; those of syphilis are bulky and frequently have a greenish tinge. Lupus is slow in its course; syphilis is rapid. A syphilitic ulcer may form in five or six weeks, while it would take as many years for the lupus disease to give rise to so much destruction. The scar of lupus is distorted; hard, shrunken and yellowish. That of syphilis is whitish, smooth, thin, often surprisingly slight, considering the destructive process which has gone before. A history of other syphilitic symptoms is sometimes, though by no means always, to be obtained in syphilitic ulcer, and too much stress must not be laid on the absence of this.

Lupus may be confounded with epithelioma. Though the diseases may occur together, yet such occurrence is rare. The localization of epithelioma, with its usually painful character, and the circumscribed induration of the lesion, will usually serve for the diagnosis. The ulceration of epithelioma generally starts from one point and spreads peripherally, while the ulceration of lupus usually begins at many points within the patch. Epithelioma very seldom occurs in the young; lupus begins in childhood.

Lupus vulgaris is to be distinguished from *L. erythematosus*

by the occurrence of ulceration, which never takes place in the latter. The patches in *L. erythematosus* are superficial, uniformly reddish in color, and are covered with adherent, grayish scales. They are, moreover, circumscribed, and are without papules or tubercles. The sebaceous glands and follicles are generally markedly involved in *L. erythematosus*; in *L. vulgaris* they remain unaffected.

Acne rosacea at times bears some resemblance to *lupus vulgaris*, but may readily be distinguished by its dilated vessels, color, the presence of acne pustules, its history and its course.

Lupus vulgaris appears to be somewhat more amenable to internal treatment in this country than abroad. It is, however, one of the most obstinate of all cutaneous diseases. Hygienic treatment is of great importance. Cod-liver oil is the most efficient internal remedy, and, next to this, iodide of potassium. It may be given with the oil, as may also iodine and phosphorus. Internal remedies should usually be well tried before external applications are made, as they alone sometimes suffice to obtain a cure. The external remedies used in the treatment of *lupus vulgaris* are of a mechanical nature, or comprise the various caustics. They should be selected with a view to the extent, locality and character of the lesions in any given case. In the earlier stages stimulating applications may be employed, with a view to bring about absorption; equal parts of tincture of iodine and glycerine, painted over the part, mercurial plaster, tar and ointment of the red iodide of mercury may be used for this purpose. I must confess, however, that in my hands these milder remedies have usually failed of success, and I have always, sooner or later, had recourse to more severe measures before a cure could be obtained. Of true caustics, potassa, nitrate of silver, arsenic, carbolic acid, acetate of zinc, chloride of zinc and pyrogallic acid may be mentioned. The first and last of these I believe to be most efficient.

Caustic potassa should be used when thorough and extensive destruction of tissue is desired. It should be remembered that the effect of this caustic goes somewhat beyond the point touched. Dilute acetic acid or vinegar should always be kept at hand to limit and check the spread of the caustic and to neutralize it. The pain is severe for the moment, but ceases on the application of the acetic acid or vinegar. Nitrate of silver is efficient in some cases, and does not leave scars. Papules and tubercles may be destroyed by boring into them with the solid stick, while patches are most successfully treated by the saturated solution repeatedly applied with the charpie brush. Nitrate of silver is one of the best caustics to use in operations on lupus about the face, but it does not penetrate deeply.

Pyrogallic acid, in the form of ointment, one drachm to the ounce, applied thickly spread upon cloths, and renewed twice daily, is painless and efficient in many cases. It selects the diseased tissue and acts but little, or not at all, on the healthy. Chloride of zinc is used according to the following formula:—

R. Zinci Chloridi,
Antimonii Terchloridi.. āā... ʒij
Acidi Hydrochlorici..... q. s. M.

Enough acid is added to dissolve the chloride of zinc, and the mixture rubbed up in a mortar with enough powdered liquorice to make a paste. This is spread upon a cloth and applied while moist. It is a powerful caustic, very painful, and eats through healthy and diseased tissue alike. It has the high sanction of Hebra, but I have never found occasion to use it.

Erasion, or scraping by means of the curette or scraping spoon, is useful in many cases, and is a plan of treatment I can highly recommend from experience. The instruments are cup-shaped, of steel, with sharp edges, and fastened by a

short shank to a convenient handle. In size, they vary from a split pea to half the size of a teaspoon. The part to be operated upon is first frozen by means of a hand-ball atomizer, charged with ether or "rhigolene," or by the application of a gauze bag filled with powdered ice and salt, and the diseased tissue is scraped or dug out. If any of the diseased tissue is left, a recurrence of the lupus must be looked for; the operation, therefore, must be thorough. Scraping may often be appropriately supplemented by the application of caustics, as pyrogallic acid, caustic potassa, or even the actual or galvano-cautery. One of the best forms of treatment is by linear scarification, as described under *L. erythematosus*. Squire has devised a multiple-bladed knife, by which this operation, over large surfaces, is much facilitated. Bésnier highly recommends the thermo-cautery, with appropriately-shaped knives. The apparatus is rather complicated.

The prognosis of lupus vulgaris will depend upon the form of the disease, its duration, the age of the patient, and the extent of surface involved. The disease, in any case, is very stubborn, and runs a chronic course. If it be confined to one patch or region, a more favorable termination can be looked for. The disease usually results in marked scarring and deformity.

Maculæ Atrophicæ. (See *Atrophy of the skin*.)

Malignant Papillary Dermatitis. (See *Paget's disease*.)

Malignant Pustule (ii) is due to the inoculation of a peculiar, virulent poison, generated in cattle suffering from a disorder known by the name of murrain or charbon. The hands are usually inoculated first, in persons engaged in dealing with cattle and hides, and after an incubation of only a few hours, pain, burning and itching are experienced at the point inoculated, followed by the formation of a vesicle or pustule, with an extensive hard areola; the pustule in-

creases to the size of a quarter-dollar, and soon breaks into an unhealthy discharging ulcer. The constitutional symptoms are usually severe; a fatal result is not uncommon. It is said that the disease can be conveyed by flies.

The treatment consists in promptly destroying the diseased patch with caustic potassa, and applying disinfectant poultices and washes. The patient is to be supported by stimulants, etc.

Medicinal Eruptions. (See *Dermatitis Medicamentosa*.)

Melanoderma. (See *Chloasma*.)

Mentagra. (See *Sycosis* and *Tinea sycosis*.)

Miliaria (ii) is an acute, inflammatory disorder of the sweat glands, characterized by the appearance of numerous pin-point and pin-head-sized papules or vesicles, attended by pricking, tingling and burning sensations. It may show itself as a papular or vesicular eruption, or both varieties may be present. The papular variety, known commonly as "prickly heat," begins with the formation of numerous, exceedingly small, acuminate, bright red papules, occurring in great numbers, and usually discrete, though often crowded together. The lesions are apt to come suddenly, and are usually preceded by considerable sweating. There are often numerous vesicles scattered among the papules. In place of papules vesicles may form, minute, acuminate, whitish or yellowish in form, very numerous, discrete, and situated on a raised red base. The vesicles, with their contents, give the affected skin a yellowish tinge. There is apt to be a good deal of sweating. The seat of predilection is the trunk, but the head, arms and lower extremities may also be attacked. The vesicles run an acute course, drying up in a day or two, and terminating in slight desquamation. The affection may either come to an end in a few days, or it may continue for some time, new crops of vesicles coming out in succession. It appears suddenly, developing in a few hours. It sometimes

comes and goes. At times it is slight, at other times severe. The tingling, pricking, burning sensations which accompany it are occasionally very distressing.

The affection is brought on by excessive heat, and is apt to be aroused or kept up by too warm clothing, flannel underwear, bandages and woolen shirts, worn next the skin through the summer, etc. In hot climates the disease is much more serious than in temperate latitudes. Children and weakly or debilitated adults are particularly liable to the disease.

Miliaria is simply an inflammatory disorder of the sweat glands. Its tendency is toward vesiculation. No difficulty should arise in regard to the diagnosis of miliaria. The diseases most likely to be mistaken for it are eczema and sudamen. The symptoms of the former have been so fully detailed above that it is only necessary to allude to them. With regard to sudamen, it is to be remembered that the vesicles of this affection rise directly from the skin, without inflammatory signs. When inflammation is present the affection is miliaria. (See *Sudamen*.)

The treatment of miliaria is simple. The patient should be kept as cool as possible and undue perspiration avoided. Cool baths and sponging, the use of lead-water or black wash, dusting with astringent powders, and avoidance of warm clothing, are to be recommended. Internally, refrigerant diuretics, as the citrate or acetate of potassium, are of use. The food should be light and unstimulating; wine and beer are to be avoided.

Milium (ii). Milia are those small, roundish, whitish, pearly, non-inflammatory elevations which are situated in the skin, just beneath the epidermis, and which have their seat, for the most part, upon the face, although they may occur elsewhere upon the body. They may occur singly or in great numbers, and when formed may last for years without change. They give rise to no subjective sensations, and

no annoyance beyond the slight disfigurement which they cause. The affection consists in an accumulation of sebum within the sebaceous gland, which, owing to the obliteration of the duct, is unable to escape. The treatment consists in opening each one of the little pearly masses, squeezing out the cheesy, sebaceous matter which forms its contents, and, if there is any tendency to return, cauterizing the sac with a point of nitrate of silver or a drop of tincture of iodine.

Mole, Pigmentary (iv), sometimes called *Nævus pigmentosus*, may consist simply of a circumscribed deposit of pigment in the skin, without hypertrophy of the connective tissue elements, or of the hairy system, or in addition to the increase of pigment the other elements may also be involved. Moles vary greatly in size and shape; they may be as small as a pea or bean, or large, covering considerable surface. Sometimes moles are thick, soft, fatty, connective-tissue growths, and they may possess quite a thick growth of hair. Moles may be single or multiple, and may occur upon any part of the body, but chiefly upon the face, neck, back and trunk generally. Sometimes they appear along the course of nerve tracts. They may be congenital or acquired. The small, flat and smooth moles without hair, seen so commonly upon the trunk, are almost invariably acquired during the life of the individual. Having attained the size of a split pea, they do not often grow any larger, but remain stationary. On the other hand, the larger, raised, rough and hairy moles are almost always congenital. The only cure for moles is removal by the knife or with caustics. Caustic potassa or ethylate of sodium are good caustics for the destruction of small moles.

Molluscum Contagiosum. (See *Molluscum Epitheliale*.)

Molluscum Epitheliale (iv), formerly called *Molluscum contagiosum*, is a disease of the epithelium, characterized by rounded, semi-globular or wart-like papules or tubercles, of a whitish or pinkish color, varying in size from a pin head to a

pea. The lesion frequently looks like a drop of wax upon the skin, or like a pearl button, flattened on top and with a darkish point in the centre, representing the aperture of a follicle. They usually occur on the face, especially the eyelids, cheeks and chin. They are also met with on the neck, breast and genitalia. They increase in size slowly or rapidly, and are usually without sign of inflammation, though inflammation may exist at times. They eventually terminate by disintegration and sloughing of the mass. They give rise to no pain, itching or other inconvenience. (See "tumors" in frontispiece.)

Molluscum epitheliale is liable to be confounded with *Molluscum fibrosum*, but the two may be distinguished by their anatomical characters. In *M. epitheliale* the opening of the follicle can usually be seen as a blackish point at the apex of the tumor. The lesions are superficial and rise above the skin. They are mostly confined to the face. The tumors of *M. fibrosum* do not show the black follicular opening; they are deep and often imbedded in the skin, or even in the subcutaneous tissues. They are also found in great numbers all over the body, and are not confined to one or two localities. From warts, which they sometimes resemble, the tumors of *M. epitheliale* must be distinguished by a careful comparison of structure.

Local treatment is alone required. Applications of ointment of white precipitate, or sulphur ointment, well rubbed in, will sometimes suffice to remove the tumors. If this fails they may be opened with a small knife, the contents squeezed out, and the bottom of the cavity cauterized with nitrate of silver. They may also be burned out with mild caustics, but severe measures should never be used, because the disease is slight and tends to get well spontaneously.

Mother's Mark. (See *Nævus*.)

Molluscum Fibrosum (vi) is a connective-tissue new growth, characterized by sessile or pedunculated, soft or firm,

roundish, painless tumors, varying in size from a split pea to an egg, or larger, seated beneath and in the skin.

The growths may occur singly or in great numbers, when they usually occupy the greater part of the body. They assume various shapes; rounded and sunken in the skin itself, or in the subcutaneous tissue; or in other instances, club or pear-shaped and pedunculated, hanging often by their elongated pedicles. In consistence they are uniformly soft, but between the fingers are found to have a certain amount of body, the larger ones having a more or less elastic feel. The skin covering them is nearly normal in color and appearance. It may be loose or stretched; hypertrophied or atrophied.

The size of the tumors varies exceedingly; they are usually pea to cherry size, but may be much larger, single pedunculated ones often weighing many pounds. They are more apt to be found on the trunk, and may exist in great numbers, irregularly distributed over the surface. They are not attended by any pain, but may be annoying, from their size and weight, or may interfere with the movements of the body. They may appear at any time during life, generally first showing themselves in childhood, and may grow slowly, or rapidly at first, during life. When a certain size is reached they remain stationary, and do not change, except that the large pendulous tumors may ulcerate on the surface, from mere weight. Patients with this affection are apt to be stunted in physical and mental growth, though the general health is not impaired. It may be inherited, and may show itself in several members of the same family.

The diagnosis is easy. From molluscum epitheliale the tumors are distinguished by the fact that they do not possess any depression or aperture on their surface, and also that they are found on all parts of the cutaneous surface. From neuro-mata they are distinguished by the absence of pain, and from

lipomata by the soft and lobulated structure which those fatty growths possess.

The treatment of *Molluscum fibrosum* is simple. Where the growths are large or are situated so as to give annoyance, they may be removed by the knife. If pedunculated, they may be ligated or removed by the galvano-cautery.

The disease commonly lasts through life, although some of the tumors may undergo involution. The tumors either continue to increase in size and number, or, having attained their growth, remain stationary.

Morphœa (iv), in its usual form, begins by the development of one or more roundish or irregular hyperæmic patches, the size of a dime or quarter-dollar. When fully developed the morphœic patch resembles a plate of ivory let into the skin, having a lardaceous or waxy appearance, and surrounded by a brownish- or lilac-colored areola of fine capillary vessels. The lesions may develop to the size of the palm, they may be found in any part of the body, and having attained their full size, they may remain stationary for years. Sometimes they undergo spontaneous evolution; at other times the skin shrivels, wrinkles, and a sort of atrophy and browning of all the tissues takes place. This condition has been named by some "scleroderma." It is not at all like the typical form of that disease, however.

The treatment of morphœa is not usually followed by any satisfactory result. More good has been gained by the administration of arsenic, with the use of electricity, than by any other means.

Nævus (vi). (See also *Telangiectasis*.) Vascular nævi are congenital formations, composed chiefly of blood vessels which have their seat in the skin and subcutaneous tissues. They may be prominent, turgescient, erectile, or even pulsating, tumor-like growths (*angioma cavernosum*), or they may be flat, non-elevated, well-defined or faint, smooth patches

(*nævus simplex*). The latter is the "mother's mark" of popular nomenclature. Nævi occur of all sizes, from that of a small pin-head to hand-sized or larger areas. Their color may be any shade of red. They are seldom multiple, and generally occur about the head, the lip being a favorite seat. They are usually stationary, but sometimes decrease as life advances; occasionally, on the other hand, in the erectile varieties, an increase in size is observed. They all become paler on pressure. The more prominent growths are markedly compressible.

The treatment of nævi will depend upon the situation, form and size of the growth in any given case. The principle of treatment is either bodily removal of the growth by means of the knife or ligature, or the excitation of plastic, inflammatory action. The latter may be accomplished in any one of a number of ways. Minute, pin-head-sized nævi may be destroyed by puncture with a red-hot needle, or a needle charged with nitric or glacial acetic acid, or with a needle connected with the positive pole of a four to ten-cell combination of a constant current battery. When the growth is a little larger—the size of a split pea to that of a ten-cent piece—it may be treated by caustic applications. Of these sodium ethylate is one of the most efficient. It rarely causes severe pain; but should it do so in any case, the application of a little chloroform will check this. It is applied on the end of a glass rod. Other caustics are nitric acid, glacial acetic acid and solution of caustic potassa. Injections with tincture of the chloride of iron, tincture of cantharides and other similar substances, as formerly practiced, are to be condemned. Several fatal cases have been reported where the tincture of iron has been employed. Vaccination has sometimes been practiced with success. The virus is introduced by means of multiple puncture with needles. This is an excellent method of treatment. Linear scarification has been tried

without success. Punctate scarification, by means of an instrument composed of a number of fine needles, arranged in a bundle and charged with caustic, is recommended by some writers. Electrolysis, as before mentioned, may be used on these larger nævi. The galvano-cautery has also been successfully used.

Nævus Pigmentosus. (See *Mole, pigmentary.*)

Nails, Diseases of. (See *Eczema, Psoriasis, Tinea circinata, Syphilis, Onychia*, etc. Also *Atrophy of nail, Hypertrophy of nail.*)

Neoplasm, Inflammatory Fungoid. (See *Sarcoma.*)

Nettle Rash. (See *Urticaria.*)

Neuralgia of the Skin. (See *Hyperæsthesia.*)

Neuroma Cutis (vi) is an excessively rare affection, characterized by the presence of variously-sized and shaped nerve growths, having their seat primarily in the true skin. The lesions are visible to the eye as split-pea-sized tubercles, scattered, or aggregated in large numbers over the affected locality. The lesions are of a rose or pink color, smooth and firm, and the intervening skin normal. Pain, of a paroxysmal character, and extremely severe, is the chief symptom. Movement of the affected part, a draught of cold air, or even mental worry and excitement are often sufficient to cause pain and even agony.

The affection must be distinguished from painful subcutaneous tubercle, a not uncommon affection. Here the lesion is usually single, and is not situated in the skin, but in the subcutaneous tissue.

The only treatment of neuroma cutis is the excision of a portion of the nerve trunk leading to the affected area.

Neurotic Excoriations. A name given to a peculiar form of hæmatidrosis. (See *Sweat, bloody.*)

Nipple, Eczema of. (See *Eczema.* See, also, *Paget's Disease of the Nipple.*)

Nits. The ova of the *Pediculis capitis*, and of the *P. pubis*. (See *Pediculosis*.)

Noli-me Tangere. (An old name for *Lupus vulgaris*.)

Odor of the Human Body. (See *Bromidrosis*.)

Onychauxis. (See *Hypertrophy of the nails*.)

Onychia. Inflammation of the matrix of the nail, usually followed by falling of the nail itself. One form of the disease is characterized by the formation of herpetic vesicles under the nail, with extreme neuralgic pain. The nail may or may not be thrown off in this form of the disease.

The treatment of onychia should be directed to the removal of any general cause in the condition of the system. Locally, the following ointment is of service:—

℞. Liq. Ferri Subsulphatis..... ʒ ss
 Ung. Aquæ Rosæ..... ʒ ss. M.

Or, when there is much pain, the following:—

℞. Hydrarg. Chlor. Mite,
 Pulv. Opii,
 Extract Belladonna.....āā..... gr. iij
 Ung. Aquæ Rosæ..... ʒ ss. M.

Onychia, Syphilitic. (See *Syphilis of the nail*.)

Onycho-gryphosis. (See *Hypertrophy of nail*.)

Onycho-mycosis. (See *Tinea circinata of the nail*.)

Pachydermia. (See *Elephantiasis*.)

Paget's Disease of the Nipple (vi), or “*Malignant Papillary Dermatitis*,” is a malignant disease of the nipple and adjacent structures, at first closely resembling eczema, and later taking on the features of carcinoma. The disease begins as an ordinary red, weeping eczema, with symptoms of burning and itching. The discharge, crusts, etc., are precisely those of eczema, but the disease takes on a peculiar livid color, different from the brighter red of eczema. The nipple gradually “melts away” and becomes obliterated, but not retracted; the affected tissues are firm, hard, rather sunken

below the general level of the skin; gradually the structure of the mammary gland becomes involved, and also the axillary glands. The disease makes very slow progress, but its tendency is fatal. The treatment is thorough destruction, by caustics, in the earlier stages, and in the later, amputation of the breast.

Parasitic Sycosis. (See *Sycosis*.)

Paronychia. An inflammation around the edge of the nail—a whitlow or “run around.” It usually results from the nail taking an abnormal direction of growth and pressing into the soft parts. (See *Onychia* and *Syphilis of the nail*.)

Pediculosis (ix), (*Lousiness*), is a contagious animal parasitic affection, characterized by the presence of pediculi or lice, and the lesions which they produce, together with scratch marks and excoriations, accompanied by itching. Three varieties of the disease are encountered, which are designated according to the names of the species of lice, viz., pediculosis capitis, pediculosis corporis and pediculosis pubis, or head, body and crab lice. (See below, under these titles.)

Pediculosis always occurs as the result of contagion; a spontaneous origin of the parasites is quite incredible. The pediculi do not bite, but are furnished with a sucking apparatus, which they insert into the mouth of a follicle, and obtain blood by the means of this.

The diagnosis of pediculosis may almost always be made by finding the parasites, but these are frequently few in number in any given case, and must be carefully searched for, remembering in the case of each variety its especial habitat. When the pediculi cannot be found, the location of the scratch marks offers valuable circumstantial evidence pointing to the parasitic character of the disease. In the scalp and pubis the presence of nits or ova may almost always be made out, and they, of course, are pathognomonic. The prognosis of

pediculosis is always favorable, and when the directions are carried out faithfully a speedy cure may be expected.

Pediculosis Capitis is due to the presence of the *pediculus capitis* or head louse. The parasite is found on the scalp alone, the occipital region being the favorite seat. The lice are sometimes found in the scalp and sometimes on the hairs. The ova, or "nits," small, whitish, pear-shaped bodies, glued to the hairs by the smaller end, some distance from the scalp, resemble scales of epidermis. Lice are usually met with among women and children of the poorer class, though they are sometimes found on persons of refinement. I have several times encountered them on ladies, where they appeared to have been contracted in sleeping cars while traveling. The parasites attack the scalp and give rise to considerable irritation, itching and consequent scratching. Effusion of serum, pus and blood results from this, and the hairs become matted together in a crust. Lice, as a rule, cause more mischief in those who are poorly nourished and ill-cared-for. The majority of cases of eczema in the back of the head, in the poorer class of children, are caused by lice. When the affection has existed for some time there is a disgusting odor about the scalp; the patient loses sleep from the itching; the mind becomes harassed, and the general health may be more or less impaired.

The best treatment for head lice is to saturate the scalp nightly, for several successive times, with kerosene, care being taken not to allow the oil to trickle down over the face and neck, for fear of its causing excoriations. A night-cap is to be used, and the head washed with castile soap and warm water in the morning. When kerosene cannot be used, the next best thing is the tincture of *cocculus indicus*. Where, owing to shortness of hair and the presence of eczema, ointments can be employed conveniently and profitably, that of ammoniated mercury, in the strength of twenty to sixty

grains to the ounce, will be found useful. An ointment of one drachm of powdered stavesacre seeds to the ounce of lard is also a good remedy. The nits, which are, however, usually killed by the applications of kerosene, are to be removed by repeated washings with soda or borax washes, soft soap, vinegar, dilute acetic acid or alcohol. It is seldom • or never necessary to cut the hair. In children it is often more convenient to do so, but in adults it is an unnecessary sacrifice, which may be avoided by patience in relieving the hair of pediculi and nits. The head coverings should be destroyed or thoroughly disinfected by baking or boiling.

Pediculosis Corporis, or lousiness of the body, is produced by the *pediculis corporis*, body, or more properly, clothes louse, which lives in the garments, and thence makes predatory excursions upon the skin. It is very similar to the head louse, but is considerably larger. Body lice are apt to be found along the seams of the clothing, particularly where this comes in closest contact with the skin, as about the neck, shoulders, waist and buttocks. As they move over the surface or attack the skin, they give rise to intensely disagreeable, itching sensations. As the parasites multiply, the itching becomes so violent, that the distress is almost unendurable; the scratching is generally severe, and long and streaked or short and jagged scratch-marks, with blood crusts and pigmentation, are characteristic features of the disease. On close inspection, the primary lesions, which are minute, reddish puncta, with slight areolæ, may be seen marking the points at which the parasite has drawn blood.

The chief seats of the lesions are the back, especially about the scapular region, the chest, abdomen, hips and thighs. When the affection has lasted for months and years general pigmentation may occur, as the result of long-continued irritation and scratching. Children are very seldom attacked. The disease is one of want, poverty and neglect. It some-

times occurs among a better class of people, particularly in the aged ; but even here it will be found to have been brought about by want of personal care.

To get rid of body lice, a hot bath, with soap, should be taken while the clothing is being heated in an oven or boiled, to destroy the parasites with their ova. After the bath, inunctions are to be practiced with an ointment of powdered stavesacre seeds, two drachms to the ounce, digested in hot lard and strained. A lotion of carbolic acid is useful to allay the itching :—

R.	Acidi Carbolicæ.....	℥iij
	Glycerinæ.....	f℥j
	Aquæ.....	Oj. M.

The disinfection of clothing should be carefully carried out, and must be repeated again after a few days, if it has not been entirely successful.

Pediculosis Pubis. The *pediculus pubis*, or crab louse, though usually found on the pubis, is also encountered in the axillæ, sternal region and beard, in the male, eyebrows and even eyelashes. Crab lice are found either crawling about the hairs or adhering closely to the surface of the skin ; their strong claws permit them to take such hold of the hairs that they are often detached only with difficulty. The ova are very much like those of the *pediculus capitis*, and are found firmly attached to the hairs.

They infest adults chiefly, and give rise to the same symptoms as the other pediculi. Although almost always contracted in sexual intercourse, yet they now and then find their way to the pubis of persons who are entirely unable to account for their presence. The amount of irritation caused by their presence varies with the individual ; it is, as a general thing, comparatively slight.

Crab lice may be removed by the application of tincture of *coccus indicus*, of full strength or diluted, or by any of the

ointments or lotions used in the other forms of pediculosis. Mercurial ointment, the well known popular remedy, is no more effectual than the others, and makes a nasty mess. Its use, in general, is to be avoided, in favor of any of the other applications. When patients will permit, shaving the pubis shortens the cure greatly.

Peliosis Rheumatica. (See *Purpura*.)

Pellagra. A disease occurring chiefly in Italy and some parts of eastern Europe, and supposed to be induced by eating spoiled corn, by malaria, etc. It is characterized by a chronic inflammation of the skin, of an erythematous character, accompanied by violent burning sensations and occasionally runs to blisters. It occurs chiefly on parts exposed to the sun, exposure to which is said to be the immediate exciting cause. The patient becomes debilitated, feverish, loses weight, and displays various nervous symptoms, as vertigo, delirium, etc. The disease has not been met with in this country as yet, but the increasing Italian immigration makes it likely enough to turn up sooner or later. The treatment is to be directed against the general symptoms and condition of the patient.

Pemphigus (ii). Pemphigus is an acute or chronic inflammatory disease, characterized by the formation of a succession of irregularly-shaped blebs, varying in size from that of a pea to an egg. (See "blebs," frontispiece.) There are two varieties, *P. vulgaris* and *P. foliaceus*. In pemphigus vulgaris the disease may attack any part of the body, but is common upon the limbs. It may also attack the mucous membrane of the mouth and vagina. The lesions are blebs, from beginning to end, forming slowly or sometimes rapidly, in the course of a day. They may be few in number or quite numerous, and often vary greatly in size in the same case. They are tensely stretched, like bladders of liquid, and rise directly from the level of the skin, which is not

usually reddened. They are clear at first, with serous contents, but later are opaque, containing pus. They do not rupture spontaneously, but gradually dry up, each bleb lasting one to three or six days. The lesions are apt to come in crops; they do not burn or itch to any marked degree. In adults there is little or no disturbance of the general system. In children the disease is apt to be accompanied by feverishness.

In pemphigus foliaceus the blebs are flaccid and only partly filled with fluid, which seems rather to undermine the epidermis than to lift it into blebs. The lesions often coalesce, involving a large part of the surface; fresh lesions are continually forming; the fluid dries into thin, whitish flakes, which are cast off, leaving an excoriated, red surface, and presenting the appearance of a superficial scald. The disease may last for years and the patient finally succumb to exhaustion.

True pemphigus is a rare disease in this country; only 89 cases are reported in the 58,617 cases of skin disease observed by the members of the American Dermatological Association. It is more common in children than in adults. Poor food and bad hygiene, pregnancy and menstrual disorders, mental depression, general debility and prostration, are among the causes. The disease is not contagious.

The diagnosis of pemphigus is usually not difficult. The presence of blebs does not necessarily indicate pemphigus, as these are developed in other diseases and by artificial means. (See *Dermatitis medicamentosa*.) So-called "pemphigoid" eruptions, obscure in origin and nature, are sometimes met with, but their course is not that of pemphigus, properly so-called. (See *Dermatitis herpetiformis*.) Pemphigus is not under any circumstances to be confounded with the bullous syphiloderm, formerly called "pemphigus syphiliticus." The latter is a purulent bleb, drying up into a

thick crust, with a deep ulcer underneath. Erythema multiforme, in the bullous form, and impetigo contagiosa, are occasionally mistaken for pemphigus. A reference to these diseases under their respective titles will show their characteristic points.

The internal treatment of pemphigus is that which is most important. The general history and circumstances of the case must be looked into, and any defects of constitution or circumstance remedied. Among drugs, arsenic is most potent. Fowler's solution, in doses of four minims, thrice daily at first, rising gradually to the limit of tolerance, may be given. Wine of iron is the best excipient for Fowler's solution in these cases. Arsenic produces its effects slowly, and it should be persisted in for months, if necessary, without expecting a cure or even amelioration, in so chronic a disease. Quinine is of value, and in some cases linseed meal, in ounce doses, with milk, has proved valuable. Cod-liver oil and stimulants may be required at times. The patient should be allowed to rest, and should be free from worry and anxiety, so far as this is practicable.

Local treatment is also important. The blebs should be punctured and evacuated as soon as they have formed. Soothing and astringent lotions, and especially dusting powders, as that composed of equal parts of oxide of zinc and starch, may be employed. Baths containing bran, starch or gelatine, may be employed in some cases. The continuous bath, in which the patient lives, eats and sleeps, for months, has been employed in severe cases. Occasionally, water does not agree, and in these cases mild ointments, as that of oxide of zinc or diachylon, may be prescribed.

Pemphigus runs an extremely uncertain course. Relapses frequently occur. When the blebs are numerous, flaccid, imperfectly formed, and inclined to rupture, and when they are rapidly and frequently formed, the prognosis is unfavor-

able. Repeated febrile attacks also indicate an unfavorable tendency. On the whole, then, we may say that the prognosis of pemphigus must be very guarded, as even when beginning as a slight attack, an unfavorable turn may be taken and the case end fatally.

Pemphigus, Syphiliticus, properly the bullous syphiloderm. (See *Syphilis of the skin*.)

Peforating Ulcer of the Foot is usually characterized by a small aperture, like the orifice of a sinus, in the centre of a large corn, which leads directly down by a narrow channel to exposed and diseased bone. Sometimes there are granulations around the orifice. The lesion is indolent, there is no pain, even on pressure, and little or no discharge. The ulcer is usually seated over the articulation of the metatarsal bone with the phalanx, generally over that of the first or the last toe. There may be several ulcers, and both feet may be affected. It is supposed to be due to nerve influence. Complete rest, even by the use of an artificial limb, is sometimes necessary to heal this rebellious disease.

Petechiæ are the small red spots, quickly changing to blue and livid tints, which characterize the eruption of purpura. (See *Purpura*.)

Phosphorescent Sweat. Cases of this peculiar condition have been reported as occurring in phthisis and after eating phosphorescent fish, as well as in cases of excessive sweating, the perspiration appearing luminous in the dark.

Phthiriasis. (See *Pediculosis*.)

Piebald Skin. (See *Vitiligo*.)

Pigmentary Mole and Nævus. (See *Mole*.)

Pityriasis Simplex (Capitis) (ii). A scaly disease of the skin, chiefly occurring in the scalp, where it forms the commonest variety of "dandruff." Fine pearly scales form in more or less abundance through the scalp and are brushed off or drop on the neck and shoulders. There is some itching.

After a time, in young persons, the hair begins to fall and early baldness results. (See *Alopecia*.) Pityriasis of the scalp may be confounded with squamous eczema, psoriasis and some forms of seborrhœa, into which latter disease it sometimes merges. In eczema, however, the scalp is redder and more infiltrated, the scales are more scanty, and there is almost always either a history of weeping and oozing, or some characteristic lesions of eczema elsewhere. In psoriasis the scales are apt to have a yellowish tinge; the disease prevails more around the edge of the hairy scalp, and some characteristic patch of psoriasis is almost always to be seen elsewhere on the skin. In seborrhœa the oily element is prominent; the scales are matted together, yellowish and greasy, so that if they are laid on blotting paper a grease spot soon forms.

The treatment of pityriasis of the scalp is chiefly local. The scalp should be thoroughly cleansed by shampooing with soap and water, or if the scales are abundant, with the *spiritus saponis kalinus*:—

R. Saponis Viridis.....	℥ij
Alcoholis.....	℥j. M.

Dissolve by the aid of heat and filter.

This soapy wash is to be mixed with water and used as a shampoo. A teaspoonful with an equal quantity of water rubbed into the scalp, with the addition of more warm water, will quickly work up into a fine lather that will cleanse the scalp effectually. So soon as this is washed out with pure water and the scalp dried, one of the following applications should be made. If the hair is thick, the following is preferable:—

R. Acid Carbolic.....	℥j
Alcoholis seu Aq. Cologniensis.....	℥iss
Glycerini.....	℥iiss
Ol. Limonis.....	℥iss. M.

A few drops of this mixture are dropped here and there over

the surface by means of a Barnes' dropper, such as is used for eye drops, and then well rubbed into the scalp with a stiff brush. As little as possible should be allowed to get into the hair, as it is easily made greasy by repeated applications. This and all applications, except the soapy wash, should be made daily, at least at first. The spiritus saponis kalinus may be used every two days or every week, as may be necessary to keep down the accumulation of scales and the matting of hair by the oily applications.

When the hair is thin and short, ointments may be used, and the best of these, for ordinary use, is one containing sulphur :—

R. Sulphur Præcipitat..... ʒj-ij
Ung. Petrolii..... ʒj M.

Another ointment, very useful in these cases, is the following :—

R. Acidi Tannici..... ʒj
Ung. Aquæ Rosæ,
Ung. Petrolii..... āā..... ʒiv. M.

A certain number of cases do well under stimulant mercurial remedies, as this :—

R. Hydrarg. Ammoniat..... ʒj
Ung. Petrolii..... ʒj. M.

Now and then, but very rarely, tar is of use. Its odor and stickiness is, however, a serious objection to its use. The following formula will be found as convenient as any :—

R. Ol. Cadini,
Ol. Amygdalæ..... āā..... ʒj
Aq. Coloniensis..... ʒvj. M.

Internal treatment is sometimes, but not by any means always, demanded. Tonics, and particularly iron, will be found useful. If there is constipation, with a tendency to anæmia, a not very uncommon combination in young persons suffering from pityriasis, the *mistura ferri acida* will be found an efficient tonic aperient :—

R. Magnesii Sulphat.....	℥j
Ferri Sulphat.....	gr. iv
Sodii Chloridi.....	℥ ^{ss}
Acidi Sulphurici, dil.....	f℥ij
Infus. Quassiaæ.....ad.....	f℥iv. M.

SIG.—A tablespoonful in a tumbler of water, before breakfast.

The amount of the dose must be regulated by the effect produced in each individual case.

When an iron tonic alone is required, the following may be given :—

R. Tinct. Ferri Chlor.,	
Acid. Phosphoric., dil....āā....	f℥ ^{ss}
Syrupi Limonis.....	f℥j. M.

SIG.—Teaspoonful, or less, in a wineglass of water, thrice daily.

Pills of the iodide of iron are also useful in some cases.

The prognosis of pityriasis capitis, in itself considered, is favorable, although some time may be necessary to effect a cure. Taken in hand early, before the hair has fallen much, the *defluvium capillorum* may be arrested. Little more can be hoped for than this, in the more favorable cases, and when “dandruff,” with progressive baldness, has existed for some time, the hair cannot be made to grow again by any drug at present known.

Pityriasis Rosea (ii), also called “Pityriasis maculata et circinata,” is an affection so slight as hardly to be worth mentioning, were it not that it is frequently mistaken for more important affections. It is characterized by discrete or confluent, macular or maculo-papular lesions, from a pin-head to half-dollar size, slightly or not at all raised. The color of the lesions is rosy or pale red, with a more or less tawny or green tint. The surface is always dry and slightly scaly, and there is a tendency to heal in the centre, giving a circinate appearance. The seats of election are the sub-clavicular, lateral thoracic, and scapular regions. The disease generally

lasts from one to three months. It may be mistaken for syphilis, tinea versicolor, tinea circinata, seborrhœa corporis, lichen ruber and psoriasis, more especially the three first named, some forms of which it closely resembles. Reference may be made to these affections, to ascertain their characteristics. The affection, though strongly suspected of being parasitic, has never been proved such. It is not contagious. Treatment does not seem to influence the disease, which, however, gives no trouble or annoyance, though often causing mental disquietude.

Pityriasis Pilaris. (See *Keratosis pilaris*.)

Pityriasis Rubra is an inflammatory disease, involving usually the whole surface, characterized by red coloration and abundant and continuous exfoliation of epidermis in the form of large, thin, whitish scales. Beginning in one or more spots, the disease spreads rapidly, and in a short time may invade the entire surface, which is uniformly reddened and covered with whitish or grayish scales, which are being continually cast off and re-formed. The skin, as a rule, is not at all thickened; usually there is little or no burning or itching. The patients are very susceptible to the sensation of cold. The affection is usually chronic, and it may last for years. Pityriasis rubra is a disease of adult life, and is very rare, only sixteen authentic cases having been reported among nearly sixty thousand cases of skin diseases observed by the members of the American Dermatological Association during the past five years. Its interest lies in the fact that it may readily be mistaken for other important diseases, as eczema squamosum, psoriasis, lichen ruber and pemphigus foliaceus. It differs, however, from eczema in its universal distribution, absence of marked thickening of the skin, size of scales and their rapid production and abundance, and in the absence of burning and itching. Psoriasis rarely invades the whole, or even the greater portion of the

surface, while pityriasis rubra, as a rule, attacks the whole surface uniformly. The scales in psoriasis are thicker and yellowish, the patches markedly infiltrated, and where the process is active there is itching and burning. From pemphigus foliaceus, pityriasis rubra differs in showing no disposition to the formation of bullæ. (See, also, under these various diseases.)

Treatment must be on general principles and adapted to the needs of each case. Locally, bran and other soothing baths, and inunctions with bland and soothing ointments, are often available. Saline aperients, diuretics, iron, quinine and arsenic may be prescribed, but, in general, time seems to do more than treatment.

Pityriasis Versicolor. (See *Tinea versicolor*.)

Plica Polonica is not a disease in itself, but is, practically, aggravated lousiness. It was formerly common in Poland and Austria, and occurred chiefly among the low and filthy inhabitants of that part of Europe. It consists in a matted and tangled condition of the long and neglected hair, glued together by discharges from the scalp irritated by lice. It is unknown in this country, because it requires a lifetime of assiduous cultivation of dirt and neglect to produce it. I have heard patients express the fear that they were victims of this disease, and have even heard the diagnosis made by physicians, but I venture to say that no case of true plica Polonica has ever occurred in this soap-and-water-ridden country, since the arrival of the settlers at Jamestown.

The treatment is simple in the cases of pediculosis capitis which are severe enough to be sometimes called by this name. The hair is to be cut short, if really necessary, parasiticide remedies applied (see *Pediculosis capitis*), and cleanliness enjoined.

Pompholyx. (See *Dysidrosis*.)

Porcupine Disease. (See *Ichthyosis hystrix*.)

Porriqo. (See *Eczema* of the head.) *P. decalvans* (see *Alopecia areata*). *P. favosa* (see *Favus*).

Port-Wine Marks. (See *Nævus*.)

Prickly Heat. (See *Miliaria*.)

Prurigo (ii). An excessively rare disease in this country, though met with in Europe. It usually begins at an early age, within the first or second year, in the form of an urticaria, and commonly lasts through life. When developed it consists of firm, pin-head- to pea-sized elevations under and in the skin, usually discrete, but sometimes grouped. The color of the lesions is pale red, or, like the surrounding skin, there are no scales. The disease usually first attacks the extensor surface of the lower extremities, particularly the tibiæ. The forearms are next invaded, and then the trunk. The head is rarely attacked; the palms and soles never. In severe cases buboes may form in the glands of the inguinal regions.

The eruption is accompanied by intense itching, and consequently blood crusts are always present, and in time the hairs are torn and rubbed off, and the skin becomes harsh, thickened and pigmented.

The life of the patient is one of untold misery, far surpassing, according to the accounts of European physicians, that to which any other disease gives rise, and suicide is the occasional recourse of the unfortunate victim.

The diagnosis of prurigo is not difficult, although cases of eczema are occasionally reported in the journals under this name, usually by physicians not conversant with skin diseases. The disease has a distinct and well-defined history, which prevents it from being mistaken for eczema. Eczema, indeed, often accompanies prurigo, being aroused by scratching or the application of remedies, but this can be cured by appropriate treatment, while the prurigo goes on, unaffected by treatment. Pruritus and pediculosis corporis used to be called prurigo, but the common consent of writers on skin

diseases for the past fifteen years has confined the designation to the disease just described. There is no symptom but that of itching in common between these affections, and reference to the titles *Pruritus* and *Pediculosis corporis*, in this work, will show how different are the symptoms.

The treatment of prurigo, should a genuine case present itself (only 6 have been reported in the 58,000 cases of skin disease included in the statistics of the American Dermatological Association!), should be first directed to the general condition of the patient. The diet should be generous. Everything that will tend to improve the state of the patient's health is to be taken into consideration. Iron, arsenic, quinine, and especially cod-liver oil, may be prescribed. External remedies are particularly useful. Baths of various kinds, and also tar and sulphur applications, are particularly to be mentioned.

The prognosis of prurigo is not very hopeful. It is said to be curable if treatment is commenced in childhood, but scarcely so in the adult. If a case is reported as having been easily cured, it is probably because a mistake has been made in diagnosis.

Prurigo Senilis. (See *Pruritus* and *Pediculosis corporis*.) The name prurigo was formerly given to the diseases now known by these names.

Pruritus (viii). Pruritus is a functional, cutaneous affection, manifesting itself solely by the presence of the sensation of itching, without structural alteration of the skin. The various forms of itching encountered in the course of many diseases of the skin, accompanied by organic changes, have been mentioned elsewhere, in connection with the diseases in which they occur. Pruritus, it must be remembered, is a distinct affection. The first thing that occurs is itching, and any lesion of the skin visible later is the result of the scratching to which this symptom gives rise. The feeling varies in

different cases. Sometimes the patient describes it as being as if a piece of rough flannel were in contact with the skin. At other times it is said to be like the crawling of insects, or like a tingling sensation with the desire to scratch. It may be slight, or so severe as to be almost intolerable. It is most frequent in middle life and old age (the latter is one variety of the “prurigo senilis” of old writers, the other is lousiness).

The itching arouses an irresistible desire to scratch and rub, with the result that the surface is generally seen to be somewhat roughened, hyperæmic and excoriated, in a slight or marked degree. In other cases the external signs are slight, so that were it not for the statement of the patient, the presence of any marked disorder might be doubted. The itching is usually intermittent, and is always worse at night. Pruritus rarely invades the whole body at one time, though various regions may in turn be attacked. In most cases it occurs in certain localities, and chiefly the trunk, scalp, genitalia and anus.

Pruritus vulvæ must not be confounded with other itching affections of the female genitals. The itching may be seated in the labia, vagina or clitoris, and is an exceedingly distressing affection. It is more apt to occur in middle or old age. In children, it is often caused by the presence of ascarides in the rectum and about the anus.

Pruritus scroti is the form generally met with in the male. It may involve this region alone, or may extend along the perineum to the anus. The orifice of the urethra may also be the seat of the disease. The sensations are usually intensely annoying, and cause the patient to rub and scratch violently. It is worse at night, and is aggravated by warmth.

Pruritus ani occurs in both sexes, and in children as well as adults. The itching may be around the orifice or just within the rectum. In middle-aged or elderly persons, it is

very often associated with hemorrhoids. It is, if possible, more intolerable than any other of the local varieties. Sometimes it is constant, but more often it comes and goes from time to time, and is also worse at night.

The causes of pruritus are extremely varied, and it is important to keep this in mind, for the cause must, in most cases, be removed, in order to obtain a cure. It may be caused by physiological changes, as gestation, or by any irregularity of the menstrual function in young women. Occasionally, it is associated with hysteria, and it is sometimes met with at the climacteric period. Leucorrhœa is a common cause. Organic diseases of the uterus and ovaries are, at times, accompanied by it. Pruritus is likewise met with in many cases of jaundice, and is sometimes a distressing symptom. Various diseases of the nervous system are accompanied by pruritus. Gastro-intestinal derangement, constipation, genito-urinary diseases, in both sexes, and, finally, the ingestion of certain medicines, and notably of opium, may give rise to the affection. It would hardly be necessary to add, were not the mistake so often made, that true pruritus is in no way caused by either vegetable or animal parasites. When these are present, it is by accident.

Pruritus is a functional affection, usually due to reflex nervous action. The nerve disturbance, unaccompanied by structural change, constitutes the whole process. The tissues remain unaltered throughout the entire course of the disease.

The diagnosis of pruritus presents no difficulties. It is a disease of the skin, without any primary sign of alteration in its structure. Whatever lesions may be present are secondary, and the result of scratching, or of strong applications made by the patient. The diagnosis depends upon the patient's statement as to the subjective symptom of itching. Pruritus is most apt to be mistaken for pediculosis, the secondary symptoms of the two diseases, scratch marks

and excoriations, being similar. These, however, are more marked and definite in character in pediculosis. The finding of lice will settle the question. They are to be carefully looked for in the clothing, and every case of so-called pruritus should be suspected to be pediculosis until the absence of the parasites is shown.

The treatment of pruritus is a matter demanding careful consideration and study in each individual case. A successful result will, in most cases, only be attained by recognition and removal of the cause. Constitutional and local remedies are both demanded. The internal remedies are to be directed against the cause, whatever the nature of this may prove. If constipation exists, the bowels are to be suitably regulated, salines being usually preferable. If there is flatulence or dyspepsia of any kind, such a diet is to be prescribed as shall overcome the digestive difficulty, and coarse, irritating and indigestible foods are, in all cases, to be avoided. Exercise and fresh air are beneficial. A sojourn at some mineral springs, particularly those of Saratoga, may at times be recommended, when a course of the aperient waters, of which the Hathorn is best, may be taken. In many cases, close attention to these details will be followed by the most gratifying results.

As regards drugs, the usual tonic and alterative medicines are to be employed. Irregular menstruation must be treated by the judicious use of iron or other remedies, cod-liver oil, etc. Quinia and strychnia are sometimes of use. Recourse may be had to bromide of potassium and chloral, alone or together, in order to subdue general nervous symptoms. Morphia should in no case be used, as it tends to aggravate the itching.

External treatment affords great relief, and is to be used in all cases. Cold and hot douches, used alternately, or hot water, applied as hot as it can be borne, or plain vapor baths

are often useful. Medicated baths, containing three to six ounces of bicarbonate of sodium, or two to four ounces of carbonate of potassium or borax, to thirty gallons of water, will, at times, afford relief. Sulphuret of potassium and sulphur-vapor baths are sometimes used with success. Inunctions with a bland oil, as almond oil, may be practiced after these baths.

Lotions of various kinds are the most generally useful applications in pruritus, and those containing carbolic acid are, by far, the most generally efficient. Carbolic acid, in fact, is worth all the other remedies put together as an anti-pruritic, and should always be preferred, to begin with, unless some reason exists against its use. It may be employed in lotion, in the strength of five to twenty grains to the ounce of water, with a little glycerine. In the following lotion the anti-pruritic effect of potash is added to that of carbolic acid:—

R. Acidi Carbolic.....	3j
Potassæ Fusæ.....	3 ss
Aquæ.....	f3 viij. M.

When other remedies fail, oil of peppermint may be applied, especially over circumscribed, itchy localities, avoiding the mucous and muco-cutaneous surfaces when such applications are apt to give pain. Morphia in solution, one to three grains to the ounce; cyanide of potassium, fifteen to thirty grains to the pint; dilute hydrocyanic acid, from one to four drachms to the pint; chloroform; chloroform and alcohol, a drachm to the pint; lead water; dilute ammonia water; dilute nitric acid, ten minims to the ounce of water, acetic acid or vinegar; chloral lotion, ten to thirty grains to the ounce of water, are all serviceable remedies, which may be tried singly or in succession in troublesome cases. “Liquor picis alkalinus,” an alkaline solution of tar, the formula of which is given under eczema, is a most valuable remedy. It should be used at first in the strength

of two or more drachms to the pint of water, gradually increasing.

In some localized forms of the disease ointments are to be used in preference to lotions; the following is a good one:—

R. Acidi Carbolicī..... gr. x-xv
 Ung. Zinci Oxidi..... ℥j. M.

The following is recommended in pruritus vulvæ (though ointments should rarely be used in this form of pruritus):—

R. Hydrarg. Chlor. Mite,
 Ext. Belladonnæ..... āā..... ℥j
 Ung. Aquæ Rosæ..... ℥j. M.

The following is a good ointment, but not to be used on abraded surfaces, and only with caution on the muco-cutaneous surfaces:—

R. Camphoræ,
 Chloralis Hydratis..... āā..... ℥j
 Ung. Aquæ Rosæ..... ℥j. M.

The camphor and chloral are to be rubbed together until fluid, and then added to the ointment. The mixture may also be used as a lotion with glycerine and water.

In pruritus of the female genital organs, water as hot as can be borne, sponged upon the parts, forms an admirable anæsthetic, and should be used in all cases, whatever other treatment is added. Sponging with hot water may be followed by the application of one of the following lotions: Carbolic lotion, as given above; decoction of tobacco, two drachms of the leaf to the pint; sulphurous acid; or, solution of alum in barley water. A prescription containing a drachm of the sulphite of sodium, four drachms of water and an ounce of glycerine may be painted on. Sometimes emollient poultices, particularly a poultice of freshly-made almond meal, which evolves a small quantity of hydrocyanic acid, will be found very soothing.

Pruritus ani is generally best treated by means of ointments. One of the best of these is an ointment containing two drachms of tar to the ounce of cold cream. Another, composed of equal parts of belladonna and mercurial ointments, is to be applied on a pledget of lint. An oil, composed of half a drachm of carbolic acid in an ounce of oil of sweet almonds, is a more agreeable application than those mentioned, and I think just as efficacious. Penciling with oil of peppermint, pure or with an equal proportion of glycerine, may do in mild cases, where the patient does not scratch and tear the parts, but it cannot be employed where there are abrasions or fissures of the muco-cutaneous surface. The application of any of these remedies should be preceded by sponging with very hot water.

In pruritus scroti the following prescription will be found useful:—

R. Bismuthi Subnitratis.....	ʒ ij
Acidi Hydrocyanici.....	fʒ ij
Mist. Amygdalæ.....	fʒ iv. M.

In the pruritus of jaundice, mercurial ointment is said to be of value, also lotions of chloroform (one drachm to five of glycerine) cyanide of potassium (one drachm to the pint of water), and acetic acid baths or lotions in the strength of half a pint of the acid to three gallons of water, or about two quarts of strong vinegar to an ordinary thirty-gallon bath. I may say here that a solution of benzoic acid, alone or with an alkali, is known to aid in the dispersion of bile pigment, and may, therefore, aid in the relief of this form of pruritus. I have not, as yet, had an opportunity to try this.

I cannot leave the discussion of this important subject, the treatment of one of the most painful and annoying of all diseases of the skin, without adding some general remarks, the result of my experience, not only in the treatment of pruritus, but also of other skin diseases of a chronic and stubborn

nature. In all of these much depends upon the care and thoroughness with which the physician's directions regarding diet and regimen are carried out. To ensure this the directions themselves must be full and explicit. The patient's case must be made the subject of careful study; the exact diet suitable to the individual must be decided upon and enforced in such terms as to leave no doubt in the patient's mind as to the importance of every detail. Generalities in the way of directions, with a careless indication, in broad terms, of the articles of diet to be used and avoided, are not likely to produce a serious impression on the patient's mind, and the failure to amend is followed by a general despondency and distrust of all remedies.

The prognosis of pruritus should be guarded. The disorder, as a rule, is obstinate; often extremely so. The prognosis often depends largely upon the cause and our ability to remove it. The patient must be encouraged to persevere with and thoroughly carry out the treatment. In grave cases melancholic symptoms may be present. Occurring in the aged, the prospect of ultimate cure is poor. In the middle-aged, pruritus vulvæ is the commonest form met with; a most distressing malady and one which calls for every possible effort to ameliorate it on the part of the physician.

Pruritus Hiemalis, or winter pruritus, is a peculiar form of itching, dependent upon atmospheric influences and occurring chiefly in cold weather. It usually makes its appearance in October, and lasts until spring, being worse in clear, frosty weather, and disappearing at times, if the weather becomes warm and moist. It occurs chiefly on the inner surfaces of the thighs, about the knees, the calves and the ankles. The affection may be relieved, but not usually cured. Emollient ointments, as vaseline and glycerine, with alkaline baths, give most relief. Occasionally the carbolic acid wash is useful. The undergarments should be soft and unirritating.

Psoriasis. Psoriasis is a chronic disease of the skin, characterized by reddish, slightly elevated, dry, inflammatory patches, variable as to size, shape and number, covered with abundant, whitish or grayish mother-of-pearl colored, imbricated scales. The disease varies greatly in its extent and intensity in different cases, sometimes showing a typical development; in other cases represented by one or two obscure lesions. It possesses, almost invariably, however, certain characters which serve to identify it. The lesions begin as small, reddish spots, scarcely raised above the level of the skin, which almost immediately become covered with whitish, imbricated scales. They often develop rapidly, reaching the size of coins in a few weeks. At other times the course of the disease is more sluggish. The extent of the eruption varies greatly. A few patches may be all that are present, or the entire surface from head to foot may be involved, with scarcely a clear spot to be found. Commonly the disease shows itself in the form of variously-sized, scaly patches, scattered over different parts of the body. The patches are characteristic. They are usually rounded, sharply defined from the surrounding skin, and consist of a mass of imbricated, yellowish-white scales on a red base. When the scales are picked off, a smooth, shiny, reddish surface is shown underneath, on which can be perceived a few pin-point-sized drops of blood. The abundance of the scales is a marked feature in some cases, where they are formed rapidly; that is, in well-developed cases the patient's bed may be filled in the morning with a handful of scales, which have accumulated during the night. When the disease exists about the joints fissures may show themselves. *There is no watery discharge at any period of the disease.* Sometimes the eruption takes on a highly inflammatory character, with redness, swelling and severe burning and itching, while at other times all these symptoms are much less marked, and, in fact, the patient

would hardly be aware of the existence of the disease, except for its appearance. Though the individual patches of psoriasis may be small, and generally are so, yet they sometimes coalesce into hand-sized or larger patches, or may even cover the greater part of a limb.

Psoriasis may occur on any part of the body, but is most apt to be seen on the extensor surfaces of the limbs. It is sometimes found on the elbows and knees when it shows itself nowhere else. The back is more commonly attacked than the chest, and the scalp is a frequent seat of the disease. In the latter locality it sometimes occurs in patches, but more frequently as a diffuse and abundant scaliness. It is apt to extend a little beyond the border of the scalp, especially behind the ears and on the forehead, and this is quite characteristic. Psoriasis does not occur upon the mucous membranes. The so-called "psoriasis of the tongue" is probably some different condition. Psoriasis is not contagious.

The cause of psoriasis is not known. It is apt to occur in well-nourished, rosy-complexioned, light-haired people, the "picture of health," excepting that they are apt to be a little rheumatic. Now and then, however, it is met with in thin, worn persons, who are in poor health. Psoriasis rarely occurs in children, though Stelwagon has reported a case where it occurred in a child between three and four years of age. It rarely appears to be hereditary, but this tendency is occasionally met with. Some cases of psoriasis are worse in winter, and disappear almost or entirely in summer; others are worse in summer. Diet, I think, has little influence in causing the disease, though in some cases it may influence its course quite markedly. Psoriasis and syphilis are not connected in any way. There is a syphilitic eruption, sometimes called "syphilitic psoriasis," because the lesions resemble those of psoriasis. This most unhappy term has

caused much confusion of mind, but it must be remembered that the cause, course and treatment of syphilis differ *in toto* from those of psoriasis. (See the *Papulo-squamous syphiloderm*.)

The diagnosis of psoriasis is easy when the affection is well-developed and presents its typical appearance. The form and aspect of the lesions, and the history of the case, will usually serve to determine its nature. Scanty and ill-developed eruptions of psoriasis are, however, at times, distinguished only with difficulty. Nevertheless, it is an important matter to accurately determine the nature of the disease, for its treatment is widely different from that of the affections with which it is liable to be confounded; its prognosis also is different, and in addition, two of the other affections are contagious.

Two or three small patches of psoriasis occurring alone, upon the arms or legs, may be mistaken for eczema. Itching, however, is always present in eczema, and therefore, itching is one sign that an eruption in question is not of this nature, though not a sure one, since psoriasis also sometimes itches.

In the majority of cases of eczema, there will be a history of moisture at some time. Psoriasis is always dry and scaly; never moist. The scales of psoriasis are more abundant, larger and whiter, than those of eczema. The patches of eczema are usually bold and well-defined in outline, while those of eczema fade into the surrounding skin.

Syphilis, in the form of the papulo-squamous syphiloderm, is very apt to be mistaken for psoriasis and *vice versâ*. Psoriasis, however, is more apt to be symmetrical in its distribution. It inclines to involve a large portion of the surface at once, or to be found in regions remotely separated, which the squamous syphilitic eruption rarely does. In psoriasis the lesions seem to be on the surface, so to speak. They are very scaly, but without much infiltration. The syphiloderm,

on the other hand, is deeply indurated, and is only scantily covered with scales. In psoriasis the knees and elbows are apt to be involved. In syphilis these are not often attacked. Occurring on the palms or soles, the disease is apt not to be psoriasis, which is very rare in this locality. The color, though often deceptive, sometimes aids in diagnosis. It is usually much lighter in psoriasis, while in syphilis it is apt to be a dusky, ham color. The age of the patient, and the duration of the disease, may give a clue to the diagnosis. Psoriasis generally first shows itself before the age of twenty; this form of syphilis later. The history of psoriasis is that of a chronic disease, lasting for years continuously, or in an intermittent manner. Syphilis rarely retains one form for any length of time. Other points in the history, infection, the occurrence of other lesions, etc., may come into use. Itching is rare in syphilis, common in psoriasis. Finally, the touchstone of treatment may be resorted to in very obscure cases.

Tinea circinata and psoriasis are sometimes mistaken for one another, but the patches of tinea are less inflammatory, red and infiltrated, and are much more superficial. The scales in tinea are larger and lighter, and the patches show no attempt at symmetry. The microscope shows the existence of a fungus in the scales of *tinea circinata*, which is absent in psoriasis, and a history of contagion may often be obtained in the former disease which is absent in the latter.

Psoriasis may occasionally be mistaken for seborrhœa, as this disease occurs on the chest and back; it may also be confounded with severe forms of lupus. A comparison of the description just given of psoriasis with that of the two former diseases, will show in what points the difference lies.

The constitutional treatment of psoriasis, like that of eczema, should be based on a careful study of the history and

habits of the patient. Attention should be given to the patient's general health and his condition, whether stout and well-nourished, or thin and delicate. Regard must be had also to any functional derangement. The history of the eruption itself must also be inquired into, as to its acuteness or chronicity, as to local and constitutional treatment which may have been previously employed, together with the effects of the same. In addition, inquiry should be made regarding the influence of the seasons, and whether the eruption is apt to disappear for a time and to break out again.

Fortified with this knowledge the medical treatment can be entered into intelligently. In the large majority of cases arsenic is pre-eminently the remedy. But, while arsenic is as near a specific as, in the nature of things, it is possible for any medicine to be, yet it must be employed judiciously if its good effects are to be obtained, or even if we do not wish to do harm. Arsenic should not, as a rule, be given where there is much gastric irritation, and it is hardly necessary to say that it should not be continued, should it disagree even slightly. The patient should be warned of its possible effects, and should be under the constant watch of the physician; on the first symptom of indigestion, pain in the stomach or bowels, or diarrhœa, the dose should be lessened or the use of the medicine suspended. Large or almost toxic doses do not hasten the cure of psoriasis; they sometimes even retard it by upsetting the stomach. Sometimes only a minute dose, as half a minim of Fowler's solution, is borne at first, when, later, tolerance is gained and a full dose given. Some patients need and will bear large doses of arsenic, but this idiosyncrasy must be learned by careful, tentative increase of the dose, beginning always with a moderate one. Arsenic should not usually be given in acute and inflammatory forms of psoriasis. Arsenic acts slowly. When, in a case of psoriasis, it is going to do good, improvement generally begins to be

shown after two or three weeks, but to get the full benefit of the drug it must be given for several months, and its administration should be continued for several months after the eruption has disappeared. *Liquor potassii arsenitis*, or *Fowler's solution*, is the best form in which to administer arsenic. It should never be directed in drops, as mistakes are likely to occur. It may be administered in water alone, or in a bitter infusion or tincture, or with wine of iron:—

℞. *Liq. Potas. Arsenit.*..... ℥ij
Vini Ferri.....ad..... f℥iv. M.
 SIG.—A teaspoonful in water, after meals.

The dose here is four minims—a fair average dose for an adult. The amount may be gradually increased, say every week, until an effect upon the eruption becomes perceptible, or until the limit of tolerance is reached.

Sometimes it is desirable to give arsenic in pill form:—

℞. *Pulv. Acidi Arseniosi*..... gr. ij
Pulv. Piperis Nigræ,
Pulv. Glycyrrhizæ Rad....āā.... ʒij. M.
Fiant pil. No. xl.
 SIG.—One after meals.

Or occasionally powders may be preferred:—

℞. *Pulv. Acidi Arseniosi*..... gr. ij
Pulv. Sacch. Lactis..... gr. cl. M.
Fiant chart. No. xl.
 SIG.—One after meals.

But neither pills nor powders are as effective as *Fowler's solution*, and I rarely prescribe them unless forced by circumstances.

Some cases of psoriasis require tonics, evidently, from the appearance of the patients; others will be found, on experience, to demand such treatment. Tincture of the chloride of iron is the best medicine to use in those meagre, worn-looking persons, as nursing mothers when the attack has

come on during lactation. Next to iron in value is cod-liver oil, and these remedies occasionally succeed when arsenic fails. In acute inflammatory cases diuretics are occasionally of service. Acetate of potassium, in half drachm doses, may be given three or four times a day, in a wineglass of water. The alkaline mineral waters are also of service. Other drugs have been administered in psoriasis, but I think that those just mentioned will be found sufficient.

The local treatment of psoriasis is of more or less importance, according to the nature of the case. When the lesions are few, small and widely disseminated, and there are no disagreeable subjective symptoms, local treatment is inconvenient and need not be employed. When, however, there are a few large patches, or when the eruption is situated on some conspicuous part of the person, or gives rise to annoying burning or itching, local treatment is required and will be found advantageous. If there are scales, these should be first removed by rubbing with *sapo-viridis* and hot water, or by the use of a hot-water bath. If the patches are few in number, large and very scaly, the following solution, well rubbed in, will remove the scales readily and give an opportunity for making healing applications:—

R. *Acidi Salicylici*,..... ʒj
 • *Alcoholis*,..... fʒ iv. M.

This is especially useful on the scalp, when, after the scales have been cleansed off by this means or by means of *spiritus saponis kalini* (two parts of *sapo viridis* dissolved in one part of hot alcohol and filtered) used as a shampoo, an oil composed of one drachm of oil of cade to the ounce of oil of almonds or of alcohol may be well rubbed in by the aid of a soft tooth brush. On the edge of the scalp and about the face the best ointment is that of ammoniated mercury, twenty to forty grains to the ounce.

When it is desirable to get rid of the scales and patches in

the most rapid manner possible chrysarobin (chrysophanic acid) is the best application. An ointment of half a drachm to a drachm to the ounce is very efficient, and will remove a patch in a few days, leaving a white spot of skin surrounded by a purplish areola in its place. But there are strong objections to the use of chrysarobin. It discolors everything with which it comes in contact, dyes the hair orange-yellow, and ruins the clothes. It cannot be used on the scalp, nor about the eyes and cheeks, because it gets up a sort of erysipelas there, and it cannot be trusted in the hands of most patients, because, unless used cautiously, it may inflame the skin wherever used. G. H. Fox has suggested the following solution, which is quite effectual and saves the smearing which renders the chrysarobin ointments so annoying and disagreeable :—

℞. Chrysarobin..... ʒj
 Ætheris et, Alcoholis..... āā..... q. s.
 Collodii..... ʒj. M.

Rub up the chrysarobin with a little alcohol and ether, and add to the collodion. It forms a sort of emulsion, which should be shaken before using. By the aid of a camel's-hair pencil in the cork, this may be painted over the affected patches after removal of the scales. When it dries, it will not come off on the clothes, a great advantage.

Next to chrysarobin in activity comes pyrogallic acid. This may be used in ointment—a drachm to the ounce. It is almost as effectual, and is much more cleanly, although it leaves a blackish stain. I think it the best local application for psoriasis. The only caution to be observed is, not to rub it over a large area, say a quarter of the surface of the person, at any one time, for fear of absorption. Preparations of tar have been used from time immemorial in the treatment of psoriasis, but I think the remedies above mentioned are

better, and they are certainly much more agreeable. When there is a good deal of itching, however, tar may be used, either as an ointment, of one to two drachms to the ounce, or in the following formula:—

R. Saponis Viridis,
Picis Liquidæ,
Alcoholis.....āā..... ℥iv. M.

This is to be rubbed firmly into the patches, previously denuded of scales, twice daily.

In very severe and extensive, or universal psoriasis, baths with inunctions of bland oils and fats are better than any of the applications mentioned. Tar may be used in these cases cautiously.

The prognosis of psoriasis, so far as the individual attack is concerned, is, in medium and mild cases, usually favorable. But the disease is prone to relapse, and the physician should warn his patient that, while the attack can be cured, the affection is liable to return, and that no treatment, however well directed, will surely prevent the disease from coming back. Severe cases, especially when the entire surface is covered with the disease, are often rebellious to all treatment.

Purpura (iii). Purpura may be idiopathic or symptomatic. The idiopathic form commonly presents itself in two varieties, *P. simplex* and *P. hemorrhagica*. Purpura simplex is characterized by the appearance, in successive crops, of numerous petechial spots in the skin and visible mucous surfaces. These are usually attended with little or no constitutional disturbance, although malaise, loss of appetite, etc., may precede the outbreak of the eruption by some days. The spots come out suddenly, often in the night, and the patient finds his skin, usually the legs and about the knees, strewn with the sharply-defined, pin-head to pea-sized hemorrhagic lesions. The color of the eruption, at first bright red, soon becomes purplish, and the lesions may be

single and scattered, or here and there mingled in irregular patches. The only subjective symptom observed is slight itching on the appearance of the lesions; often even this is absent. Occasionally wheals, like those of urticaria, occur with the hemorrhages, and then there may be much itching. Blebs have been noticed in this form of purpura.

Purpura simplex is more frequently observed in the old than in the young. An attack may last from a fortnight to several months, the cutaneous lesions coming out in crops. The causes are often obscure; it occurs in the well-nourished as well as the debilitated. Malarial influences also have an effect in causing the disease.

The lesions of purpura simplex are so peculiar, being small hemorrhages under the skin which do not disappear on pressure, that there is usually no difficulty in making a diagnosis. The lesions may, however, be confounded with flea-bites. The puncture made by the insect in the centre of each hemorrhagic point will, however, settle the diagnosis.

There is one form of purpura simplex which is known as "P. rheumatica," where the prodromal symptoms are more severe, and where severe rheumatic pains are felt, especially in the joints of the lower limbs. When the eruption comes out the rheumatic symptoms abate; relapses here are common; the disease may last for months, and sometimes takes on the appearance of erythema multiforme.

The second variety of idiopathic purpura, *P. hemorrhagica*, is a much more severe disease. It begins by marked prodromal symptoms, as debility, loss of appetite, languor, headache, and feelings of general distress. The spots of eruption appear suddenly, first upon the limbs and then spreading to other parts of the body, occurring usually in great numbers and often coalescing to form hand-sized patches. Hemorrhages from the mouth, gums, nose, stomach, bowels and bladder, and even into the brain, may occur

simultaneously and the disease may have a fatal termination. The disease may occur at all ages and among the strong and well nourished as well as among the weak and ill-fed.

Purpura hemorrhagica is liable to be confounded with scurvy, but scurvy occurs in those who have been subjected to bad food and improper hygiene. P. hemorrhagica comes on suddenly, scurvy comes on slowly, with tumefaction of the gums, bleeding and looseness of the teeth, etc.

The symptomatic forms of purpura are those in which the hemorrhage into the skin is a comparatively insignificant symptom of a more important disease. The specific fevers, various forms of anæmia, leucocythemia and scurvy form one group of these. Another is formed of cases where the extravasation of blood into the skin is caused by the ingestion of drugs. (See *Dermatitis medicamentosa*.) A third group includes cases occurring from mechanical causes, as feeble circulation, varicose veins, thrombosis, etc. A fourth group includes all those cases in which the nervous system is primarily at fault, as tabetic purpura, purpura in connection with diseases of the central nervous system and neuralgia, etc.

In the treatment of purpura attention must first be paid to the removal of the cause, if this can be ascertained. Nutritious diet, and above all, if the hemorrhage be extensive, perfect rest in the horizontal position, are important. In purpura simplex, ergot, iron and quinine, the mineral acids, together with frictions and cold baths are beneficial. Purpura hemorrhagica calls for prompt and decided treatment. In addition to perfect rest and diet in ordinary cases, tincture of the chloride of iron in doses of twenty to thirty drops, alone or with ergot and digitalis, may be given. Turpentine and acetate of lead, with opium, may be administered in some cases. Oil of erigeron, in five to ten-drop doses, on sugar, every two to four hours, is highly recommended. In severe

cases ergot may be given hypodermically, one grain every four hours. Electricity has succeeded when other remedies have failed. Finney recommends ergot and belladonna at first, and bark, ammonia, and the mineral acids later.

The prognosis of all forms of purpura, except purpura hemorrhagica, is good. The disease is apt to be stubborn to treatment, however, P. rheumatica particularly so. The latter is a treacherous disease, and the prognosis should be guarded.

Closely connected with purpura is the hemorrhagic condition, known as "bloody sweat," or "hæmatidrosis," which consists in the appearance at the outlets of the excretory ducts of the sweat glands, of a reddish fluid containing blood. It is usually in small quantity and localized, and is a cutaneous hemorrhage, taking place about the sweat glands, and emptying itself through the sweat ducts. It is a very rare disease.

Quinine Eruption. (See *Dermatitis medicamentosa*.)

Rhus Poisoning. (See *Dermatitis Venenata*.)

Ring Worm. (See *Tinea circinata*, *T. tonsurans* and *T. sycosis*.)

Rodent Ulcer. (See *Epithelioma*.)

Rupia. (See *Syphilis of the skin*.)

Sapo Viridis, a soft soap, made originally of herring fat and potassa, and containing about three per cent. of caustic potassa. The genuine soap comes from Stuttgart, in Germany, but I think there must have been some change made in the fatty constituents of late years, as it does not smell, by any means, so disagreeably as it used.

Sarcoma of the Skin (vi) consists of shot, pea, hazel-nut, or larger sized, variously shaped, discrete, non-pigmented or pigmented tubercles, or tumors. Non-pigmented tumors, occurring as single or multiple growths upon the various regions, represent, perhaps, the commonest manifestations of the disease. They are smooth, firm, elastic, not markedly painful upon pressure; in color, reddish, violaceous, or

brownish red. It is said that the multiple pigmented sarcoma always appears first upon the soles and backs of the feet. The disease may be mistaken for the papular syphiloderm, gummata, lupus and lepra. It occurs generally toward middle age. The disease is malignant, usually proving fatal in the course of a few years. Recently, hypodermic injections of Fowler's solution, in the dose of two drops, gradually increased to nine drops, diluted with two parts distilled water, daily, have been used successfully. They are worth a trial, for no other treatment avails.

Scabies (ix). Scabies, or the itch, is a contagious, animal parasitic disease, a sort of eczema or dermatitis, caused by the presence of an animalcule, the itch mite, in the skin. It is highly contagious. The female itch mite no sooner finds itself on the skin than it begins the work of burrowing, forming, just below the surface of the skin, a burrow in which the eggs are laid, the fæces deposited, and in which the itch mite lives. The male is said never to enter the skin, but to live upon the surface. After a time, a certain number of young itch mites are hatched forth, all of which begin at once to take care of themselves, and to burrow. Thus, the early symptoms of the disease are caused by the irritating presence of these parasites at various points, and characterized by the formation of minute, more or less inflammatory, puncta, papules and vesicles. Later, the burrows can be seen in the shape of more or less tortuous, beaded, yellowish or blackish lines, not thicker than a thread, and one-eighth to one-quarter of an inch in length. Later still, scratch-marks, blood crusts, etc., show themselves, and the disease spreads day by day.

The affection usually begins about the hands, and especially about the fingers. The wrists, the penis in men, and in women the mammæ, are next involved. The other softer and more protected parts of the body are then invaded. The axillæ and buttocks are very apt to be attacked. The lower limbs are generally spared, excepting the toes in children.

Itching, oftentimes very severe, is a marked feature of the disease, increasing in severity with its extension. It is worse at night, when the patient is warm in bed.

The cause of scabies lies, as has been said, in the irritating presence of the itch mite in the skin. It is so contagious that it may be conveyed by bedding or clothes, or even by a shake of the hand. It is not a common disease in this country, occurring only in the proportion of one per cent. among all skin diseases, being led in frequency by eczema, thirty-one per cent.; syphilis, ten per cent.; acne, seven per cent.; psoriasis, between three and four per cent.; and various others. In Europe, on the other hand, the unwashed populations furnish a larger proportion of scabies than of any other skin disease.

The diagnosis of scabies is, as a rule, not difficult. The presence of the burrow is sufficient to decide the matter, and this should be looked for in every suspected case. The mite itself may usually be extracted from the minute vesicle at the end of the burrow by the aid of the point of a pin or needle, but failure to capture it need not be regarded as negative evidence in the diagnosis, for it requires a good light, sharp eyes and some dexterity to succeed. The burrows must not be confounded with irregular lines of epidermis filled with dust or dirt. The resemblance is at first sight strong. In the majority of cases the burrows are only to be detected upon the sides of the fingers. The regions of the body mentioned as the favorite seat of scabies must be taken into consideration in making the diagnosis, and finally, it must be remembered that other affections may be concurrent with scabies upon the body.

Once recognized, the disease is, in most cases, easily cured. The great point is to use the applications in such a manner that the parasite may be destroyed without undue irritation of the skin, and, indeed, with relief to this condition. When

the case is recent a cure can be rapidly and easily effected, but when of old standing there is apt to be a good deal of eczema in connection with the scabies, and after the parasite is destroyed the eczema remains for treatment. The following ointment seems to cure the eczema while killing the itch mite:—

R. Pulv. Naphtol..... ʒj
 Ung. Aquæ Rosæ..... ʒj. M.

On coarse skins *sapo viridis* may be used with the naphtol:—

R. Pulv. Naphtol..... ʒiss
 Saponis Viridis..... ʒv
 Cretæ Alb. Pulv..... ʒj
 Axungiæ..... ʒx. M.

I have used one or another of these prescriptions exclusively, for a year or two past, and prefer them above all others. Sulphur is the old standard remedy, and may be used in the form of ointment, ranging in strength from one to four drachms to the ounce, according to the tenderness of the skin.

The treatment, whatever it be, should be preceded by a hot bath with soft soap, after which the ointment should be rubbed in, and allowed to remain. After three days of treatment, a bath and an inunction being taken daily, the patient should report for inspection. Too vigorous a course of treatment may give rise to a dermatitis, which will require weeks to cure.

The prognosis of scabies is always favorable; a week or two will suffice in average cases, but the irritation of the skin requires longer treatment to overcome.

The "army itch," much talked of after the late war, was a severe form of scabies.

Sclerema Neonatorum (iv) is a disease of infancy, appearing usually at birth, consisting of a diffused stiffness and hardness of the cutaneous and subcutaneous tissues, accompanied by coldness, œdema, swelling and general

circulatory disturbance. The disease may be congenital, or it may appear during early infancy. It is commoner among premature children. It begins in the lower extremities and extends upwards. The infant looks like a frozen corpse. Spontaneous recovery rarely takes place. Treatment should be directed against the general condition.

Scleroderma (iv) is a usually chronic skin disease, characterized by a diffuse, more or less pigmented, rigid, stiffened or hardened, hide-bound condition of the skin. The process may occupy weeks or months in evolution. When fully developed, the skin is stiff, rigid, immovable, firm, the part seeming as if frozen or carved out of wood. The course of the disease is variable. Sometimes it undergoes spontaneous involution, in other cases it may last a lifetime. Exposure to cold and dampness seems to have been the exciting cause in many cases. True scleroderma is an excessively rare skin disease. There is another disease allied to *Morphœa* which is also known by this name. (See *Morphœa*.)

Scrofuloderma (vi). There are a number of skin diseases, so closely connected with the condition of the system called scrofulous as to be properly designated *scrofulodermata*. Of these, one of the commonest is that which begins in one or more of the superficial lymphatic glands, especially about the neck and clavicular region. The glands become enlarged, and the process extends to the skin overlying them, which becomes red and infiltrated. Finally a cold abscess forms, and is discharged through the skin, and an ulcer of slow progress, with undermined violaceous border, results.

Another common form of scrofuloderm is the "gumma," thus called by Bésnier. The most superficial form of scrofulous gumma begins as a small infiltration or node in the skin, of a livid red color. Increasing in size, slowly at first, and later more rapidly, it sometimes extends in one or more directions, involving the entire skin, and softening at one or

more points to four small ulcers, with burrowing cavities from one to another. The discharge from these ulcers is usually sero-purulent or sanious, and occasionally bloody, and the skin may be undermined by numerous communicating galleries. Occasionally the disease takes on a diffuse, infiltrating form, spreading in an irregular patch over the skin, involving its entire surface, and giving rise to serpiginous, shallow ulcers. The deeper forms of scrofulous gummata form under the skin, and only appear on the surface at first as a livid, violaceous discoloration, and later break down into an indolent ulcer. The scrofulous ulcer is always indisposed to heal. It looks as if it were on the very verge of cicatrization, but it does not actually scar over, or if it does a week or two later, the cicatrix may open in one place while forming in another.

The form of scrofuloderm just described is usually met with about the face, beneath the lower jaw and around the neck. I have met with it occurring above or below the clavicle, or on the cap of the shoulder. It is usually accompanied by other symptoms of the scrofulous condition. Old scars, the result of previous lesions, may often be detected in one region or another.

This form of scrofuloderm is to be distinguished from lupus vulgaris, and from syphilis by the presence of the concomitant general symptoms of scrofulosis, and by the peculiar features of the lesions, which differ materially from those of lupus and syphilis. The characters of the primary lesions, the form of the ulcers and their course, and the amount of crusting, differs materially. When the diagnosis between scrofuloderma and syphilis is difficult, the history in some cases will aid. Finally, mercury may be given (not iodide of potassium) in puzzling cases. This, which will cure the syphilitic lesion, will not affect the scrofuloderm.

Another and rarer form of scrofuloderma is characterized

by the formation of papillary, wart-like or fungous growths, of a pale, bright dusky or violaceous red. The surface of these growths is ulcerated, with a thin discharge and some crusting. These lesions are apt to occur on the backs of the hands, and may go so deep as to lead to bone changes. The course of this form of scrofuloderma is exceedingly chronic.

A fourth form of scrofuloderma may be referred to, which shows itself in small, hard, scattered, flat papules, with a raised, violaceous area. The lesions may occur on any part of the body, but are usually met with on the forearms, legs and face. At first they look like the pustular syphiloderm, but crust over after some weeks, leaving a depressed, pin-head-sized, well-like cavity in the lesion. Finally the lesion disappears, leaving a punched-out scar, like smallpox. This form of scrofuloderma is chronic to an extreme degree. New lesions form while the old ones are cicatrizing, and while the affection gives no trouble, it is very rebellious to treatment.

The treatment of scrofuloderma should be both general and local. Cod-liver oil, iodine, usually in the form of iodide of potassium, or of Blancard's pills of iodide of iron, and iron alone, are most usually serviceable. Lately, Milton has reported excellent results from the administration of calomel or gray powder, two or three times a week, at bedtime, for a fortnight, with a saline every morning, so as to produce a daily action of the bowels. Then the mercurial is suspended for a fortnight to a month, the saline being continued. If the appetite fails, bitters and mineral acids are to be given. Locally, a mild zinc ointment. Milton lauds this treatment as curing when all else fails.

Locally, the ulcers are to be treated, as a general thing, with stimulating ointments, those containing mercury in particular. Ointments and powders of iodoform are also useful. Tincture of iron and chlorinated soda solution may

also be used. When the disease is extensive, scraping with the curette or sharp spoon, to remove the morbid tissue, as in lupus, is the quickest method.

Scurvy, Land. (See *Purpura*.)

Sebaceous Cyst (i), or "Wen," as it is popularly called, appears as a variously-sized, firm or soft, roundish tumor, seated in the skin or subcutaneous connective tissue. The skin covering the tumor is natural in color or whitish, from stretching. The tumors may occur singly or in great numbers, and vary in size from that of a pea to a walnut or larger. They are usually firm, but sometimes doughy, and are generally freely movable and painless. Their usual seat is upon the scalp, face, back and scrotum, though they may be met with anywhere, even on the soles. They may last for years unchanged, but sometimes break down and ulcerate. They may degenerate into epithelioma in old persons. Some sebaceous cysts are flat, with a minute hole in the centre; others tend to rise and become semi-globular. The latter are those commonly found on the scalp, where they are devoid of hair.

The contents of sebaceous cyst may be milky or cheesy in consistence, and are often decomposed and fetid. The tumors are, in fact, nothing more than enormously distended sebaceous ducts and glands, the walls of which have become hypertrophied until they form a tough sac.

The treatment of sebaceous cyst is excision. The cyst should be carefully dissected out, as otherwise the disease is apt to recur.

Seborrhœa (i). Seborrhœa is a disease of the sebaceous glands of the skin, characterized by an increase in the quantity of the sebum poured out, and also, in most cases, by an alteration in quality of the secretion. There are two varieties, *S. oleosa* and *S. sicca*.

Seborrhœa oleosa appears in the form of an oily coating

upon the skin, giving it an unctuous and greasy feel. Its most common seat is on the scalp and about the face, particularly the nose and forehead, where it appears as a greasy coating, containing more or less dust and dirt, and looking as though the skin had been smeared with dirty ointment. In the scalp it collects on the hair, giving it a dark, limp look, as if it had been freely oiled, or when the scalp is bald it looks as if oil had been poured over it.

Seborrhœa sicca, or dry seborrhœa, occurs in infants as the *vernix caseosa* or smegma of the newborn. Here it is almost physiological, and is usually soon removed. If it remain, it becomes a diseased condition, and as such is often seen on the scalp. Dry seborrhœa shows itself on both the hairy and non-hairy portions of the body, as a more or less greasy mass of scales, of a dirty yellowish color, and somewhat adherent to the skin. On the scalp, these masses are larger and oilier, tending to cling to the skin in thick plates, and leaving, when picked off, a smooth, grayish, moist or oily surface beneath. In old persons the scalp, and sometimes the region of the beard, is covered, to a greater or less extent, with a brown, adherent, greasy coating, which is essentially seborrhœic in character.

Seborrhœa sicca of the scalp, like pityriasis, with which it is sometimes confounded (see *Pityriasis simplex*), is sometimes followed in the young by premature baldness. If taken in time, however, baldness from this cause can be prevented, and it is desirable in all cases to remove the seborrhœic condition, even if it gives rise to little or no annoyance.

Seborrhœa of the foreskin and glans penis is an abnormal flow of the normal secretion of this part, known as *smegma preputii*. If unattended to, it leads to balanitis, from the irritation of its rapidly decomposing sebaceous products.

Seborrhœa is induced by a variety of causes, prominent among which is the chlorotic or anæmic state. It is more apt

to occur about puberty, or in early adult age. It may occur in persons otherwise healthy. In such cases it is usually curable by local measures.

The diagnosis of seborrhœa is usually not a matter of much difficulty; the evidently sebaceous character of the lesions pointing out its nature with sufficient certainty.

The treatment of seborrhœa should usually be both constitutional and local. Fresh air and exercise, especially in the case of young women, is to be insisted upon. Attention should also be paid to diet. The history should be looked into and any functional irregularities corrected when possible. Success in treatment often depends upon ascertaining and meeting the exciting cause in the individual. Cod-liver oil, iron and arsenic are the most generally useful remedies. The following is a useful prescription:—

R. Tinct. Ferri Chlor.,
 Acid. Phosphoric, dil..... f ʒj
 Syrupi Limonis..... f ʒij. M.

SIG.—Half a teaspoonful to a teaspoonful, in a wineglass of water, three times a day.

Arsenic is best given in the form of Fowler's solution, in four-minim doses at first, gradually increased until the disease begins to disappear, or until the limit of tolerance is reached. It should never be prescribed to be taken in drops, but always in combination with some adjuvant. The following is an excellent formula:—

R. Liq. Potas. Arsenit..... ʒij
 Vini Ferri.....ad..... f ʒiv. M.

SIG.—Teaspoonful after meals, in water.

The local treatment of seborrhœa is very important. In seborrhœa of the scalp the scales and crusts must first be removed. If hard and caked, as is sometimes the case in old people, the scalp should be soaked in oil over night. Hot

water and castile soap will then remove the softened crusts, or, if this should fail, the alcoholic solution of *sapo viridis* may be employed. A tablespoonful of this (see *Spiritus saponis kalinus*) may be applied to the scalp with a sponge and a considerable quantity of warm water added, so as to make a lather. After vigorously shampooing the scalp for a few minutes, the soapy matters are to be washed away with an abundance of clear, warm water, the scalp dried quickly with a soft towel, and it is ready for the application of the more strictly remedial agents. These should be in the form of oils, if the hair is at all thick, because ointments are so apt to stick the hairs together and make a mess. The sort of application to be made will depend upon the condition of the skin. If much irritated, one of the simple oils, as this, will be found convenient :—

R. Ol. Moringæ Nucis (Oil of
Benne)..... ℥j
Pulv. Benzoini gr. v. M.

Rub up together and digest over a water bath for three hours ; cool ; add three drops of absolute alcohol ; let stand for a time and filter. This makes a good basis for other oily mixtures. Ol. ricini and ol. olivæ, so often recommended for use upon the scalp, tend to dry and clog, but oil of Benne is a non-drying oil. It may be used without the benzoin. Generally the scalp will bear more stimulating applications. Of these carbolic acid is one of the most efficient, as in the following combination :—

R. Acidi Carbolici..... ℥j-f℥j
Ol. Amygdalæ f℥iv
Ol. Limonis..... ℥j
Aquæ Cologniensisad..... ℥ij. M.

Sig.—Apply after washing.

When there is little hair upon the scalp, the following ointment may be used :—

R. Sulphuris Præcipitat..... ℥^{ss}
 Ung. Petrolii ℥^{iv}. M.
 Sig.—A small quantity to be rubbed in, once a day.

This preparation is also useful in seborrhœa about the body.

Another preparation useful about both scalp and body, especially in *S. oleosa*, is this:—

R. Acid. Tannic..... ℥^{ss-j}
 Ung. Petrolii..... ℥^j. M.

Mercurials are sometimes of value. Either the red oxide of mercury, ten to twenty grains to the ounce, or the ointment of nitrate of mercury, one to three drachms to the ounce of vaseline, may be employed.

The prognosis of seborrhœa will depend upon the duration and extent of the disease and upon the patient's general health. Dry seborrhœa can generally be gotten well, under proper treatment, in a reasonably short time. But when in the scalp and mixed with more or less pityriasis, the prognosis is not so favorable. Premature baldness may follow neglected seborrhœa. If the hair has already begun to fall out a cautious prognosis must be given. Even if the most active treatment is followed out there is little hope of bringing back the hair, although its fall may be arrested.

Shingles. (See *Herpes zoster*.)

Smegma. (See *Seborrhœa*.)

Spiritus Saponis Kalinus. A solution of two parts *sapo viridis* in one part alcohol, made by the aid of heat, and filtered.

Strophulus. (See *Miliaria*.)

Stye. (See *Hordeolum*.)

Sudamen (i) (see *Miliaria*) is a non-inflammatory disorder of the sweat glands, characterized by minute translucent vesicles, the orifices of stopped-up sweat glands. The nature and treatment of the disease are essentially the same as that of *Miliaria*.

Sweat, Bloody. (See *Purpura*.)

Sweat, Colored. (See *Chromidrosis*.)

Sweat, Phosphorescent. (See *Phosphorescent sweat*.)

Sweating, Excessive. (See *Hyperidrosis*.)

Sycosis (ii). Sycosis is a chronic, inflammatory, non-contagious disease, involving the hair follicles, characterized by pustules, papules and tubercles, perforated by hairs, accompanied by burning and itching. The disease is confined to the beard and hairy parts of the face. Papules and then pustules form, each one having a hair as its centre, and showing little inclination to rupture. The pustules are generally discrete, but are sometimes so numerous as to be crowded together. They are accompanied by marked redness of the surrounding skin, sometimes by swelling, burning and pain. Unless the suppuration is profuse, the hairs cannot be extracted without giving much pain. The causes of the disease are not known. It sometimes occurs on the upper lip, however, following catarrh of the nose. It occurs equally in those who shave and those who do not. *It is not contagious.* The disease is essentially an inflammation of the hair follicles. In the early stages the hairs are firm in their follicles, but when there has been a good deal of suppuration they become loose, and may be pulled out. A cicatrix, with baldness, then results.

Sycosis is apt to be mistaken for eczema of the beard, and more especially for tinea sycosis, or true barber's itch. From the latter it is, however, distinguished by several marked features. In both affections the hair follicles are attacked, but in the parasitic disease the lesions are simply large, rounded, red lumps, or variously-sized nodules, with few or no pustules. The hairs, however, in spite of the fact that there is no suppuration about their roots, come away easily, and sometimes drop out spontaneously. The presence of the spores of the vegetable parasite, when looked for in the roots of the dis-

eased hairs under the microscope, will greatly aid in the diagnosis. (See *Tinea sycosis*.) From eczema of the beard sycosis is distinguished by the absence of oozing or itching, and also by the fact that eczema rarely attacks the beard without showing itself elsewhere. It spreads about in pustules and crusts in the neighborhood, while sycosis is strictly marked by discrete pustules, each with its hair running through the centre.

External treatment is that most generally useful in sycosis. Exposure to irritating influences is to be avoided. The hair should be kept clipped close or shaved. The latter is to be preferred. Although painful at first, I regard it as the *sine qua non* of successful treatment, and usually insist upon it. In this, as in some other matters, it is only the first step which costs; after shaving a few times, the patient is brought to see the reasonableness of the procedure, by the comfort which it brings. Shaving should be performed every second or third day, according to the rapidity with which the beard grows. When shaving is to be performed for the first time, the hairs should first be clipped close, and then a poultice should be applied, to soften the crusts. When there is much inflammation, this poultice may be made of bread-crumbs and dilute lead water, and applied cold. This is very soothing. After such careful preparation, shaving is a much less painful operation than it would otherwise have been. Shaving having been established as a habit, the local medical treatment may be put into employment. When the disease is acute and there is a good deal of pain and swelling, black wash may be thoroughly applied every two or three hours, followed each time, so soon as it is dry, by oxide of zinc ointment, gently applied by means of the finger, or spread upon pieces of soft linen and bound upon the parts.

The following wash, not to be followed by ointment, is likewise of service in acute sycosis :—

℞. Pulv. Zinci Carb. Præcip.,
 Pulv. Zinci Oxidi.....āā..... ʒj
 Glycerinæ..... fʒij
 Liq. Plumbi Subacetat. dil..... fʒij
 Aquæ Rosæ..... fʒviiss. M.

In subacute cases the following wash is very good :—

℞. Sulphur. Præcipitat..... ʒij
 Pulv. Camphoræ..... gr. x
 Pulv. Tragacanth..... ʒj
 Aquæ Calcis..... fʒiv. M.

SIG.—Shake well, and apply two to four times daily.

If ointments are to be employed, the following will be found soothing, in the acute stage :—

℞. Pulv. Zinci Carb. Præcipitat.,
 Pulv. Zinci Oxidi.....āā..... ʒj
 Ung. Aquæ Rosæ..... ʒj. M.
 To be applied immediately after shaving.

Another convenient ointment, slightly more stimulating, is the following :—

℞. Hydrarg. Chlor. Mitis..... gr. xv-xxx .
 Ung. Aquæ Rosæ
 Ung. Zinci Oxidi.....āā..... ʒss. M.

When the affection is of long standing, and when there is much infiltration, *sapo viridis* well rubbed in with a flannel rag and a little water, and after washing off followed by ung. diachyli, may be employed.

When the eruption exists only at one or two points, and is subacute or chronic, stronger stimulants may be used. Sulphur ointment, half a drachm to a drachm to the ounce, or one of the mercurial ointments, may be employed.

Depilation is only to be used when the roots of the hairs are loosened by suppuration.

The prognosis in sycosis should be guarded, for while some cases yield readily to treatment, others, particularly

when the disease involves a considerable area of the face, last for months, and even years, in spite of the most assiduous attention. Relapses are not uncommon.

Sycosis, Non-parasitica. (See *Sycosis*.)

Sycosis, Parasitica. (See *Tinea sycosis*.)

Syphilis of the Skin (vi). The syphilitic eruptions of the skin are characterized by certain features in common. These are: 1. Polymorphism. 2. Peculiar color. 3. Rounded form. 4. Apyretic, indolent, non-itchy character. 5. Curability by mercury.

They will be conveniently considered under the following heads: I. Erythematous. II. Papular. III. Pustular. IV. Tubercular. V. Gummatous. VI. Bullous. (A vesicular and a pigmentary variety are described by authors, but they are so rare as to be almost non-existent.)

The Erythematous syphiloderm is the earliest and one of the commonest manifestations of syphilis, but occurring, as it often does, upon the covered parts of the body, and giving rise to no subjective symptoms, it often passes unnoticed. It comes out from the sixth to the eighth week after the appearance of the chancre, but when mercury has been given from the first its advent may be very much delayed. It presents itself in the form of diffuse macules of various sizes, and of a pale rose, later a brownish or yellowish tint. It is usually seen on the sides of the body and on the abdomen, chest and back, also on the flexor surfaces of the limbs, rarely upon the face and hands. The diagnosis of the erythematous syphiloderm is usually not difficult. It is commonly accompanied by some of the other symptoms of syphilitic infection, general malaise, nocturnal headache, wandering pains in the limbs, sore throat, etc.; while not infrequently traces of the chancre and the engorgement of the inguinal, sub-occipital and other glands, can be made out.

The erythematous syphiloderm runs a slow course, and is often accompanied, toward the last, by papular and other lesions, showing the polymorphous nature of the disease.

The Papular syphiloderm is characterized by the appearance of small, hard, solid elevations of various size, not containing fluid, and of a coppery or ham-red color, terminating in resolution. It assumes various forms, small and large, scaly, moist, and vegetating. The small papular syphiloderm consists of single and disseminate or grouped, pin-head to small pea-sized, hard, round, or pointed papules, at first bright red in color, but later of a dusky tint. It is a well-marked eruption, generally occupying a considerable area, and found commonly about the shoulders, arms, trunk and thighs.

The small papular syphiloderm may occur, as one of the early manifestations, as early as the third or fourth month, or it may occur later, after other lesions have occurred. Relapses are not infrequent. Other lesions, as large papules, small pustules and moist papules, are apt to be present at the same time. It is most likely to be mistaken for eczema, especially when it itches slightly, as it does at times, on its first appearance. It may also be mistaken for psoriasis. A reference to the description of these affections will show their distinguishing features.

The large papular syphiloderm is, in some respects, similar to the smaller variety, but is met with in other localities, and shows fewer as well as larger lesions. Its favorite seats are the forehead, just beyond the scalp (*corona veneris*), about the mouth, nape of the neck, back, flexor surface of the extremities, scrotum, labia, perineum and margin of the anus. It is one of the commonest of all the syphilitic skin diseases. It may occur early or late, but is very apt to follow closely on or accompany the erythematous syphiloderm. This variety is more amenable to treatment than the small papular.

The moist papule (sometimes called "mucous patch," though this term should be restricted to lesions occurring on mucous membranes) is the ordinary papule, with its horny, epithelial surface macerated off, usually on account of the contact of two contiguous surfaces, as in the neighborhood of the anus and scrotum, and about the mouth. The surface of these patches is dusky red, moist and secreting. These lesions are the most dangerous, as to contagion, of all syphilitic lesions, and as many cases of chancre are derived from these moist papules and from true mucous patches of the inside of the mouth, as from chancres. The favorite seats for moist papules are the glans and scrotum in the male, the external genitals in the female, the umbilicus in infants, and the anus in all three. The diagnosis rarely presents any difficulty, because there are always concomitant lesions.

Occasionally the moist papule takes on a luxuriant, papillary, warty growth, when the lesions are called vegetating papules. They resemble, but are on no account to be mistaken for, the non-syphilitic, "venereal" or acuminated wart. The secretion of the vegetating papule is highly contagious. It does not, however, produce another vegetating lesion on the person inoculated, but an ordinary chancre.

The papulo-squamous syphiloderm is a papular eruption, where the scaly element is prominent. It is chiefly interesting because it is apt to be mistaken for psoriasis—a misfortune rendered much more likely to happen by the perversity of some writers, who call this lesion "syphilitic psoriasis," a misleading and confusing term, which should never be employed. The chief element of distinction lies in the fact that psoriasis is altogether a scaly disease, with but little infiltration, while the papulo-squamous syphiloderm shows comparatively few scales, with a hard, sometimes raised base.

The syphilitic disease is not uncommonly found on the

palms and soles, while psoriasis is very rarely found in this locality. (See *Psoriasis*.)

The pustular syphiloderm occurs in a variety of forms. The pustules vary greatly in size, but are all characterized by the rapidity with which they crust, a rapidity increasing with the size of the pustule. The small pointed pustular eruption is abundant and usually occurs with some other and characteristic lesions; it presents no peculiarities of interest except that, as it matures, the epidermis around the lesion raises and forms a ring or collarette which is very distinctive. The large pointed pustular syphiloderm is the eruption which used to be called "syphilitic acne" (another barbarous and confusing designation). The pustules resemble those of acne, and still more those of smallpox, and when they occur upon the face, accompanied with high fever, care must be exercised in examining all the concomitant symptoms, or a mistake in diagnosis may be made, and a syphilitic patient thrust into a smallpox hospital. The crusts which result from the drying up of the pustules rest upon little ulcers, and this gives an important diagnostic point. For if, upon lifting a crusted pustule it displays a little well of pus beneath it, the lesion is syphilitic, while, if only an excoriation is seen, the lesion is almost certainly not syphilitic. In addition to acne and smallpox this syphilitic eruption is apt to be confounded with the iodide of potassium eruptions. (See *Dermatitis medicamentosa*.)

The small, flat, pustular syphiloderm is made up of small, flat pustules aggregated in groups and rapidly crusting. It occurs chiefly about the nose, mouth, in the beard, on the scalp, and about the genitalia. On lifting the crusts a shallow or deep ulcer is found. It may be mistaken for impetigo or eczema, but ulcers are not found in those affections. It is one of the more benign syphilodermata.

The large, flat, pustular syphiloderm shows itself in finger-

nail-sized, flat pustules on a deep red base. Sometimes the ulcer underneath is shallow, at other times deep, punched out and secreting an abundance of pus, which may dry up in thick oyster-shell-like crusts (*rupia*). The shallow, ulcerated pustules of this variety are benign. The deeper ulcers generally occur in broken-down individuals and are of more unfavorable significance. They can hardly be mistaken for any other disease. They occur in the ninth to the twelfth month of syphilis.

The Tubercular Syphiloderm. The eruption here consists of one or more solid elevations of the skin, varying in size from a split pea to a hazlenut; smooth, glistening, rounded or somewhat pointed, hard, and felt to be deeply seated. Their color varies from a brownish-ham color, to a bright red or true copper color. Sometimes they have an intensely dusky red hue, a color not met with in any other disease of the skin.

The lesions may occur singly or grouped sometimes in circles or crescents, occasionally melting together in indurated patches. Usually only a few lesions or a small patch occurs. This eruption is never diffused over a large area.

Sometimes the tubercular lesions are grouped in a ser-piginous form, and occasionally they ulcerate and crust, but not to a marked degree. The eruption is indolent and occurs late in the history of the disease, rarely showing itself before the second year. Not infrequently its appearance is delayed to five, ten, even twenty years after the initial lesion, and in women, where the initial lesion and early symptoms are often overlooked or ignored, no "history of syphilis" can be obtained. Now and then vegetations may spring up on the tubercular syphiloderm, forming wart-like and cauliflower excrescences, with a fetid secretion.

The tubercular syphiloderm is peculiarly liable to be mistaken for lupus vulgaris. The tubercles of syphilis, however,

are firmer, more deeply seated, and have a history of more rapid development. Lupus, moreover, appears usually first in childhood, while the tubercular syphiloderm is rarely seen before adult or middle age. Occurring on the face and especially in the region of the cheeks and canthus of the eyelids, the ulcerative tubercular syphiloderm may be mistaken for epithelioma, and this is the more easy because the syphilitic ulcer sometimes becomes converted into an epithelioma, of which I myself have seen two instances. The touchstone of treatment must be used here, and if the suspicious ulcer fails to yield to mercury and iodine it should be cauterized or excised.

The Gummatus Syphiloderm. Gummata are among the later lesions of syphilis. They are usually situated primarily in the connective tissue, and only subsequently make their appearance in the true skin, but occasionally the skin is first attacked and the gumma appears as a more or less circumscribed, slightly-raised, rounded or flat tumor, variable as to size and strongly tending to break down into an ulcer. The lesion resembles a blind boil or abscess, with its dusky, purplish color and almost fluctuating sensation under the finger. Gummata are usually solitary. When ulceration takes place the cavity is deep, but fills up rapidly as a cure takes place. Gummata are apt to be mistaken for furuncle, abscess, enlarged lymphatic glands, carcinoma, and for fibrous and fatty growths. Gummata are not unfrequently poulticed and then cut open, by too zealous surgeons, with great resultant chagrin, when the firm, dry walls gape, where pus was expected to flow. They should never be lanced, as it is much easier to cause resolution by appropriate remedies than to cure the open sore which follows cutting.

The Bullous Syphiloderm is very rare. It is characterized by the appearance of blebs containing a clear, watery fluid, which soon tends to become cloudy and thick. Sometimes

the lesion is more like a large pustule than a bleb. The lesions soon break or dry up with rupial crusts. When these are removed shallow ulcers are found. The bullous eruption is a late manifestation of syphilis, and is met with in the cachectic and broken down. It can only be mistaken for pemphigus or dermatitis herpetiformis, and in both of these affections the bullæ contain serum and not pus, and rupial crusts are absent.

The treatment of the syphilitic affections of the skin should, in the early diffused eruptions, be internal only. When the lesions are comparatively few in number and of some size, especially when they are ulcerative, local applications may be used with benefit. Finally, in the late and indolent ulcerative, tubercular or gummatous lesions, local treatment alone often suffices to heal the lesion, and since internal treatment, however good, will not insure against a relapse, it need not necessarily be used. Mercury is to be employed in the earlier and generalized lesions. The protiodide of mercury, in doses of one-fourth of a grain, in pill-form, thrice daily, gradually increased until the disease yields or the gums are touched slightly, is the best average treatment. The biniodide of mercury is also very useful in doses of $\frac{1}{16}$ to $\frac{1}{8}$ grain, dissolved in water, with the aid of a little iodide of potassium, when for any reason it is preferred to give the mercury in a fluid form. Iodide of potassium is to be reserved for the later lesions, or to mix with the mercurial in stubborn cases. A dose of five grains will be found large enough in the great majority of cases, but it must be pushed rapidly if the lesions do not yield.

Local treatment is required, when the lesions are situated on the face and hands, and when it is desirable to hasten their disappearance by all means, or when ulcers, with profuse and disagreeable discharge, are present in any part of the body. For dry lesions, the ammoniated mercury oint-

ment, or a twenty or ten per cent. oleate of mercury, may be rubbed firmly into the skin, once or twice daily. For moist lesions, a solution or stick of nitrate of silver may be employed. In ulcers, bits of soft linen, cut a little smaller than the lesions and spread thickly with Ung. hydrarg. full or half strength, may be applied.*

Skin Diseases in Hereditary Syphilis (vi). The syphilitic eruptions of infants are, in all respects, the same as those of adults, excepting in so far as their appearance is altered by the peculiarities of structure of the infantile integument.

The mortality of syphilitic children is very great, fully one-third failing to reach maturity. Abortion, resulting from the death of the foetus, usually occurs about the sixth month. An aborted foetus is usually in a macerated condition, the skin being easily detached, and the surface having a livid purple color. The integument either shows nothing characteristic, or large bullæ may be found on the palms and soles.

Syphilitic children generally present a healthy appearance at birth, and, for a week or two, all seems to go well. Then symptoms of debility and decreased vitality show themselves; the infant begins to emaciate, and grows wizened and aged in appearance. Catarrh of the nasal passages—"the snuffles"—shows itself, interfering with respiration, and thus sometimes itself alone being the cause of death. The skin becomes yellow, loose and wrinkled. It is drawn tight over the bones of the face, which become sallow and earthy, with prominent eyes and a peculiar senile expression, the infant presenting the appearance of decrepid old age. Now and then, however, excessive emaciation is not observed, even

* To supplement the necessarily brief account of the syphilitic skin diseases and their treatment here given, reference may be made to the text-books on syphilis. I have given my own views at some length, in an article on *Syphilis*, in the International Encyclopedia of Surgery, Vol. II.

when the syphilitic poison has affected the system to a marked degree.

The *erythematous* syphiloderm is that which is earliest and most frequently observed in infants. It generally makes its appearance about the third week of life, often accompanied by coryza, and showing itself first on the abdomen, in the form of minute, round or oval, pink macules. It spreads rapidly over the surface of the body and limbs, and the patches grow larger and darker, until they may be half an inch in diameter, slightly or not at all elevated above the surface, coppery-red in color, and no longer, as at first, disappearing under pressure. There is usually little or no scaliness, excepting slight desquamation, at times, upon the hands and feet.

This eruption is very liable to be confounded with the simple erythematous rashes of early infancy. The most important diagnostic points are the tendency to infiltration, and the formation of papules in places where the skin comes together in folds, as about the neck, and especially in the region of the genitalia and nates. In addition, the tendency to scaliness about the palms, soles, and occasionally the nates, is more or less characteristic. Sometimes, however, it is impossible to distinguish between the syphilitic eruption and simple erythema about the nates, at first sight, and the case must be held under advisement for a certain time, local treatment only being employed, before a positive diagnosis can be given. The syphilitic eruption tends to get worse, show moist and infiltrated patches, etc., while other symptoms show themselves elsewhere. The eczematous eruption will either improve under local treatment or tend to show weeping and itchy patches, and vesicles or pustules.

The *papular* syphiloderm in infants is usually met with in connection with the erythematous eruption, but sometimes it may occur first. The lesions are dull-red, small, flat papules,

occasionally mingling to form a patch. When seated about the anus or genitalia, the lesions become changed into typical moist papules, and now and then vegetations or syphilitic condylomata grow out of these lesions. These are *highly contagious*, and must be carefully distinguished from the simple vegetations growing about these parts, in children who are poorly cared for. The latter are more apt to be smaller, more pointed and dry, and occur almost invariably near some muco-cutaneous juncture. They spring directly from the skin, while the syphilitic vegetations grow from an indurated, often moist, base. The simple vegetations are not so apt to have a fetid odor, whereas, the syphilitic condylomata secrete an excessively offensive sero-purulent liquid. Moist papules in the infant are apt to occur at the verge of the anus and the commissure of the lips. In the latter locality they lead to deep fissures, the scars of which form diagnostic marks of hereditary syphilis in later life.

The *pustular* syphiloderm in infants may occur before the eighth week in children profoundly affected with syphilis, but usually shows itself at a later period. The pustules may be large, numerous and deep, or few and small, according to the severity or mildness of the disease. The thighs, buttocks and face, are usually attacked. On the face they may coalesce and form thick, green, crusted lesions, resembling those of impetigo or pustular eczema. The syphilitic crusts, however, are dark, thick and greenish, while those of the other diseases are lighter. On removal of the crusts the syphilitic lesions are found ulcerated, while only a shallow erosion is found under the eczema and impetigo crust. Moreover, itching, which is very common in eczema, does not exist in the syphilitic lesion.

A *furunculoid* eruption is sometimes met with in hereditary syphilis. The lesions begin as small nodules in the corium, and gradually increase to the size of half a nutmeg; ulcers

form on the summit; sloughs are thrown off, and irregular, unhealthy cavities, with scanty, offensive secretion, are left, the lesions subsequently running a chronic course. They often result in cicatrices.

Tubercular and *bullar* eruptions sometimes occur in hereditarily-syphilitic children; the former show no marked difference from similar lesions found in the adult. The bullar syphiloderm, the "pemphigus syphiliticus" of older writers, is usually found on the palms and soles. The skin shows patches of a violet color; in a short time small, confluent vesicles make their appearance on these spots, and then coalesce and grow larger, until the fully-formed bullæ show themselves, varying in size from that of a pea to a hen's egg, with a yellowish-green, opalescent color and purulent contents. The lesions may be brownish or hemorrhagic; they break in a day or two, and leave shallow ulcers. The bullar syphiloderm is a symptom of grave import. It is important to distinguish it from simple pemphigoid eruptions. This may be done by noting its earlier appearance (it is congenital, or appears very soon after birth), its usually more serious character, and the concomitant symptoms and history. It is rarely the only symptom. Sometimes *impetigo contagiosa* may be mistaken for the bullar syphiloderm, but its non-ulcerative character, place of election, trifling severity, etc., should prevent this mistake. (See *Impetigo contagiosa*.)

The treatment of hereditary, infantile syphilitic skin diseases is essentially that of the disease in general. Mercury may be administered by baths, inunctions, or internally. Warm, daily baths, each containing ten grains of the bichloride of mercury, are frequently highly beneficial. A small, flannel skirt, with the waist tied around the infant's neck, and then spread over the edge of the tub, will permit it to splash, without danger of sending the fluid into its mouth. The dose is sufficient for any age, from one month to twenty.

Inunctions of mercurial ointment, in full or in half strength, may be employed. The best procedure is to smear a piece of ointment, the size of a small walnut, thinly over a flannel band, and then pin it around the abdomen, not changing it, but applying fresh ointment daily, until the flannel becomes stiff. Gray powder is given internally by many physicians. I rarely use it. In the later furunculous and pustular eruptions the iodide of potassium, in doses of half a grain to two grains, according to the age of the infant, may be given with advantage. Inunctions of cod-liver oil, or the same internally, may be given at times, and nourishing and appropriate diet is absolutely required.

Syphiloderma. (See *Syphilis of the skin.*)

Telangiectasis. (See *Nævus.*)

Tetter. A popular name given to several diseases, but chiefly to eczema.

Tinea. The name given to the vegetable parasitic diseases of the skin. Of these we have *T. circinata*, or ringworm of the body, *T. tonsurans*, or ringworm of the head, *T. sycosis*, or ringworm of the beard, *T. favosa* or favus and *T. versicolor*, each of which will be described as clinically separate affections.

Tinea Circinata (ix), or ringworm of the body, is a contagious, vegetable parasitic disease, due to the presence of minute spores and mycelia or threads growing in the epidermis and giving rise to one or more circumscribed, circular, variously-sized, inflammatory, squamous patches, occurring on the general surface of the body, accompanied by itching. The disease usually begins as a small, reddish, scaly, rounded or irregular-shaped spot, which in a few days assumes a circular form, healing in the centre as it spreads on the periphery, which is usually papular, but may occasionally be made up of small vesicles. Sometimes the rings coalesce and form gyrate figures. The disease may attack any part of the body, and is

transmitted by contagion from one part to another. In children who have ringworm of the scalp more or less ringworm of the body is almost sure to be found at one time or another.

Ringworm is eminently contagious, and is not only transmitted from one human being to another, but also from domestic animals, chiefly horses, dogs and cats. Children are more susceptible to the disease, although adults also may contract it. The diagnosis of ringworm may usually be made from its very peculiar clinical features, and also from examination of the scales by means of the microscope. A few scales soaked in a drop of liquor potassæ and examined under a power of 350 diameters, will show long threads running across the epidermic cells, which are quite characteristic. Their absence, however, is not conclusive against the diagnosis of ringworm, as they are sometimes scanty and difficult to find.

The treatment of *tinea circinata* is simple. The lesions are to be cleansed with soap and hot water, and then an ointment of ammoniated mercury, 15 to 40 grains to the ounce, may be thoroughly rubbed in. The process to be repeated twice daily, until a cure is effected. In more stubborn cases, a lotion or ointment, of one drachm of sulphite of sodium to the ounce, or pure, strong sulphurous acid sopped on, will usually suffice. In obstinate ringworm of the thighs and groins, the following ointment is efficient. This is for adults:—

R. Creasoti.....	℥ xx
Olei Cadini.....	f ʒ iij
Sulphuris.....	ʒ iij
Potassii Bicarbonatis.....	ʒ j
Adipis.....	ʒ j. M.

There are other remedies innumerable, but those mentioned will, one or another, generally suffice.

Tinea Decalvans. A confusing term, indifferently applied to alopecia areata and to *tinea tonsurans*; two widely different diseases in nature, appearance and treatment, as will be seen

by referring to the account of them given under their respective titles.

Tinea Tonsurans (ix), or ringworm of the scalp, is precisely the same disease as *tinea circinata*, above described, only occurring in the scalp. It is characterized by one or more usually circular, variously-sized, more or less bald, patches, covered with ashen-gray scales, with a "goose flesh" appearance, and numerous small, broken-off stumps of hair. Sometimes the disease is disseminated, when a search through the scalp will show black points scattered here and there, which are the stumps of diseased hairs broken off level with the scalp. Ringworm of the scalp is a disease of childhood, and is not met with in the adult. It is highly contagious among children. Microscopic examination shows the hairs filled with roe-like spores, infiltrating their tissue and rendering them highly brittle.

The diagnosis of ringworm of the scalp is usually easy. The only disease with which it is liable to be confounded is alopecia areata, but here the hairs fall out entire, leaving a smooth, ivory-like surface. Now and then squamous eczema of the scalp looks like ringworm, but there are no broken-off hairs.

The treatment of ringworm of the scalp is tedious and difficult, because it is hard to get the remedies down to the roots of the hair, where the fungus greatly flourishes. Of the great number of remedies constantly turning up, almost all would be good if they could be gotten into contact with the fungus, but the best will fail if it cannot be made to reach the last and remotest spore in the deepest hair follicle.

As a preliminary to treatment, the hair should be cut short, scales should be cleansed from the scalp, and the diseased hairs should be pulled out by means of convenient forceps, immediately after which the parasiticide should be applied. In boys, when the eruption is extensive, the scalp may be shaved from time to time. Daily epilation of diseased hairs is an exceedingly troublesome, but very necessary procedure.

Among local remedies carbolic glycerine is one of the best. It may be applied to the diseased patches in strength varying from 1 in 8 to 1 in 3, according to the age of the patient, while a weaker lotion of the same should be smeared over the scalp generally, to prevent drying of the scales and spread of the contagion.

An ointment highly recommended by Alder Smith is the following:—

℞. Acid. Carbolic. Cryst.,
 Ung. Hydrarg. Niträt.,
 Ung. Sulphuris.....āā..... ℥ss. M.

The ingredients are to be mixed without heat. This ointment may be used in children over eleven years of age. Under this age it is advisable to use a double proportion, or even more, of the sulphur ointment. This may be used once a day over the entire scalp, the patches themselves being rubbed twice a day. In disseminated ringworm of the scalp, oleate of mercury (a five per cent. solution in children under eight years of age, and a ten per cent. solution in older children) may be used. The oil is to be rubbed in nightly, with a sponge mop, care being taken not to allow it to run over the face; a cap should be worn at night. When the scalp is very irritable and the application of any of these remedies causes inflammation and superficial crusting, the following ointment may be used with advantage:—

℞. Ol. Cadini..... ℥iss
 Sulphuris..... ℥iss
 Tinct. Iodini..... ℥iss
 Acid. Carbolic..... ℥xx-xl.
 Adipis Benzoat..... ℥iv. M.

In weakly children cod-liver oil, arsenic and iron are often required, and should always be prescribed if the case seems to demand them, or if the eruption spreads from one place to another while under treatment.

The prognosis of tinea tonsurans should be guarded as to the time required to effect a cure. In cases of average severity, if there are several coin-sized patches of disease, four months of careful treatment will usually be required to effect a cure. When the disease is disseminated a much longer time will be required. A cure should not be promised, unless all directions as to shaving, epilation, etc., are faithfully carried out. In cases where kerion forms artificially, or in the course of the disease, a more rapid cure may be expected. (See *Tinea kerion*.)

Tinea Kerion (ix) is an inflammatory and suppurative form of tinea tonsurans. It shows smooth, yellowish, reddish or purplish patches, more or less raised, oedematous and boggy. They are honeycombed and studded with yellowish, suppurative pits, the openings of the distended hair follicles deprived of their hairs, which discharge a mucoid, gummy, honey-like fluid. They sometimes itch, burn and pain. In severe cases baldness results. The condition sometimes supervenes in a mild degree during the treatment of tinea tonsurans. The treatment is the same as the latter, excepting that lotions of sulphurous acid may be added to the parasitocides above mentioned.

Tinea Sycosis (ix), or ringworm of the beard, is confined to the hairy part of the face and neck, and is characterized by inflammation of the hair follicles, with the formation of dull-red, fleshy tubercles, with little or no suppuration. The disease usually begins with slight redness and scaliness, as tinea circinata, but in a few days the hairs begin to be affected; they become dry, brittle and sometimes loose, the skin becomes nodular and lumpy, with points of pustulation about the hair follicles. The deeper tissues become involved later, and thick, raised masses of induration of a dusky, reddish or purplish color appear, giving rise to considerable disfigurement; the rapidity of development is sometimes re-

markable. Though there is usually little or no suppuration, yet, now and then, suppuration with crusting may be profuse, so as to mask the essential features of the disease and make it look like pustular eczema. The symptoms vary much in different cases. Sometimes there is a good deal of burning and itching; at other times there is very little. The affection is never so troublesome as simple sycosis. The cause of the disease lies in the presence of the ringworm fungus, and the structure of the parts alone causes it to differ from the other forms of ringworm in appearance.

The diagnosis of *tinea sycosis* from simple sycosis is sometimes difficult; but there are certain characteristic features which must be borne in mind. In *T. sycosis* there are hard, reddish lumps as large as a pea or a cherry, and evidently extending down into the skin, while in simple sycosis the lesions are superficial pustules on a comparatively smooth, inflamed surface. The hairs in *T. sycosis* are loose and easily pulled out, while in simple sycosis the hairs are firm and the attempt to pull them out gives rise to much pain, unless there has been a good deal of suppuration about their roots. (See *Sycosis*.) It must be remembered that *tinea sycosis* is the true "barber's itch," and is often contracted in barber shops from the use of a razor or shaving brush impregnated with fungus from a case of the disease previously shaved.

The treatment of ringworm of the beard requires both epilation and the use of parasticides. Any hairs which are loose should be pulled out, all crusts and scales removed, and one of the remedies mentioned under *tinea tonsurans* immediately applied. In addition to these, lotions of sulphite of sodium or of sulphurous acid are often useful.

Tinea Favosa (ix), or favus, is a vegetable parasitic disease, the fungus, however, being of a different species from the ringworm fungus. The affection first appears as a diffused or circumscribed superficial inflammation, with slight

scaling, followed by the appearance of one or several pin-head-sized, pale yellow crusts seated about the hair follicles, which develop into the characteristic lesions of the disease, raised, sulphur-yellow cups, which can be detached from the skin underneath, having a moist, excoriated surface. The cups are friable and can be powdered between the fingers. They sometimes aggregate into masses. Usually each cup has a hair running through its centre. When the disease is extensive, ulceration may exist under the crusts. It is usually situated in the scalp, but the nails and skin generally may be attacked in rare cases. When the nails are attacked they become thickened, yellow, opaque and brittle. Favus possesses a peculiar odor like musty straw, or like the smell of mice. The disease gives rise to some, but not to excessive, itching.

When favus has existed in the scalp to a severe degree and for a long time, a cicatricial condition with permanent baldness may ensue. Favus is a chronic disease. Situated in the scalp it requires most energetic treatment to dislodge it, and is very prone to relapse. Some pessimistic English observers think it can never be totally eradicated, but as met with in this country it is curable. It is a rare disease.

The diagnosis of favus is usually easy; the peculiar yellow cups and the odor are commonly present, and even where the shape of the cups has been lost by suppuration or broken down by treatment, a patch of characteristic color can usually be seen here or there. The mousey odor is almost always perceptible, and most cases can be diagnosticated by this alone.

In the treatment of favus of the scalp the hair is to be cut as short as possible, after which the crusts are to be removed with poultices, or applications of olive or almond oil, and soap and hot water, as in pustular eczema of the scalp. After they have been removed, the scalp, in severe

cases, will show pits and depressions, with atrophy, baldness, or areas of superficial ulceration, resembling the effects of syphilis. Depilation is then to be practiced by means of a pair of flat-bladed forceps, especially made for the purpose, or by other means. A small patch should be cleared each day. Immediately after depilation a parasiticide should be applied, and there is none better than a saturated solution of sulphurous acid. Sulphur ointment, alone or with tar, may also be employed. Yellow sulphate of mercury, half a drachm to the ounce, or chrysarobin ointment of the same strength, cautiously used, may also be used with benefit. The disease is, of course, contagious, and precautions must be taken against its transmission, particularly among children in families.

Tinea Versicolor (ix) is a vegetable parasitic disease, which begins by the formation of pin-head and split-pea-sized, yellowish spots, usually scattered here and there over the affected region. These grow gradually larger and coalesce, forming hand-sized and even extensive patches, with extremely irregular margins, sharply defined, against the sound skin. There may be only a few patches, or on the other hand, the disease may be quite extensive. The patches are usually more or less scaly. The disease does not usually itch in cool weather, but when the patient grows warm and sweats, there is apt to be a good deal of itching. In some cases there is never any itching. The chest and back are the parts usually and chiefly affected, the disease also spreading down the flanks, and over the buttocks, abdomen and groin. The disease rarely extends above the shirt collar, below the elbows, or below mid thigh. Practically, it is an affection of the trunk, which often presents a mapped appearance, owing to the peculiar and irregular configuration of the lesions. The disease usually spreads slowly, and without treatment may continue for an indefinite period. Relapses are not uncommon, even when the treatment has been most judicious.

The diagnosis of tinea versicolor is not usually difficult. The seat of the disease is usually upon the trunk alone, and, wherever else it occurs, it is always to be found there. Vitiligo, chloasma and the macular syphiloderm are the diseases with which *T. versicolor* is most apt to be confounded. In vitiligo, however, the patches are rounded and white; it is the surrounding skin which is dark; in chloasma the face and forehead are the chief seats of the disease, and are rarely spared, while in *T. versicolor* the face is never attacked. The macular syphiloderm does not often occur in large patches and sheets, and it is not confined to the localities of *T. versicolor*; also, there are almost invariably concomitant symptoms of syphilis. From all these affections *T. versicolor* is distinguished by its proneness to itch. Finally, a microscopic examination of a few of the scales, to which a drop of liquor potassæ has been added, under a power of 350, will show the peculiar and characteristic fungus, which, it may be remarked, is different from both that of ringworm and that of favus.

The treatment of tinea versicolor is simple, and, if thoroughly carried out, quite efficacious. The best plan is to anoint the affected parts with *sapo viridis*, well rubbed in daily, for a week, avoiding the contact of water. After a pause of forty-eight hours a hot bath, with soap, is taken, and the disease, if mild and recent, will be found to have disappeared. If some remains, the same process may be repeated until a cure is effected. A less rapid but more agreeable treatment is the daily application of the following—

R.	Hydrarg. Chlor. Corros.....	℥j
	Saponis Viridis.....	℥ij
	Alcoholis	f℥iv
	Olei Lavandulæ.....	f℥j. M.

This is to be well rubbed in night and morning. Another excellent application is sulphite of sodium, in the form of a lotion, one drachm to the ounce of water.

Whatever treatment is employed must be thoroughly applied. If a single patch is left untouched the whole disease may return. Two or three weeks usually suffices for a cure if the remedies have been well applied ; but the patient should be inspected a little later, to see if the disease has begun to crop out again in some obscure point.

Tooth Rash. (See *Eczema in children.*)

Ulcer. Ulcers may proceed from various diseases, leading to necrosis of the skin, or from the effects of traumatism or pressure, or varicose veins. Ulcers proceeding from various diseases of the skin, have been touched upon under the heads of *epithelioma*, *lupus*, *syphilis*, etc. Varicose and similar ulcers require no special description in the present work.

Ulcer, Rodent. (See *Epithelioma.*)

Uridrosis (i) is the name given to an excretion from the sweat glands, containing the elements of the urine, especially urea. It appears as a colorless or whitish, saline, crystalline deposit, or coating, looking as if flour had been sprinkled upon the surface. The deposit can be scraped off with a knife, and is seen, under the microscope, to present minute crystalline spiculæ. The disease is very rare. In most of the cases reported, partial or complete suppression of the renal function with disease of the kidneys and uræmic poisoning were present.

Urticaria (ii) is an inflammatory disease of the skin, characterized by the development of wheals of a whitish or reddish color, accompanied by sticking, pricking, tingling sensations. The lesions are apt to come out suddenly and disappear again in a very short time, so that patients seeking advice are often unable to show a sign of the disease, excepting scratch marks, even at repeated visits to the physician, when they may have been tortured and disfigured by it between times. The wheals are of various sizes, sometimes as small as a split pea, sometimes as large as the palm of the

hand. They average finger-nail size. While the smaller lesions are usually round, the larger ones may be very irregular, crescentic or linear; often they assume a grotesque outline. They may be barely elevated above the skin, or may rise to an eighth of an inch in height. They may be soft or firm to the touch, and whitish or pinkish in color. On the face the urticaria rash may cause great temporary deformity. The lip, or half the lip, for instance, may within a few minutes swell out to a great size, and remain thus for an hour or more. The eruption burns, stings and tingles, as if the skin had been stung by nettles, hence the popular English name of the disease, "nettle rash," while in this country it is generally called "hives." Sometimes these sensations of burning and tingling are merely annoying; at other times they may prove distressing to the last degree. Rubbing and scratching commonly aggravate the disease, bringing out new wheals.

The lesions of urticaria frequently change their locality, the eruption appearing now in one part of the body, and again in another. It occurs at all ages and in both sexes. Its duration depends entirely upon the presence or removal of the exciting cause. There are several varieties of urticaria:—1. *Urticaria papulosa*, which occurs commonly among children, in the form of widely dispersed, pin-head to split-pea-sized, flat or acuminate papules, which appear suddenly, and last for hours or days. It is attended by severe itching. 2. *Urticaria hemorrhagica*, which is, in fact, urticaria occurring in the seat of a purpuric eruption. 3. *Urticaria bullosa*, where the wheals are transformed into blebs, which may assume some of the characteristics of pemphigus. 4. *Urticaria tuberosa*, occurring in the form of large walnut or even egg-sized, firm, more or less persistent nodes or tumors, resembling somewhat exaggerated tumors of erythema nodosum.

Urticaria may be acute or chronic. The acute variety is usually, though not invariably, ushered in by slight febrile symptoms, languor, headache, depression, gastric disturbance, furred tongue, etc. The rash appears suddenly, and may involve the whole body, or a portion only, accompanied by intense, and almost intolerable, burning and stinging sensations. In a variable time, from one hour to a day, the symptoms subside and the eruption disappears, without leaving a trace, except in the form of scratch marks. Chronic urticaria may continue for months and years, or indeed, as long as the cause exists. The individual lesions, which are usually small, come and go as in the acute form; crop after crop may appear, the skin being hardly ever free from them. The patient's general health may appear fair.

The causes of urticaria are numerous and of a very diverse character. Certain external irritants and poisons to the skin, as the stinging-nettle, jelly-fish, caterpillars, fleas, bed-bugs and mosquitoes, are not unfrequent causes. Among internal causes, gastric and intestinal derangements are by far the most common. An overloaded stomach, excess in wine, beer, or highly seasoned food, may occasion an attack, while certain articles of food, as fish, oysters, clams, crabs, lobsters, pork, especially sausage, oatmeal, mushrooms, raspberries and strawberries, are all apt to bring out the eruption. Various drugs have the same effect (see *Dermatitis medicamentosa*) in some individuals. In most cases of urticaria from these causes a certain idiosyncrasy seems to exist. Any irritation of the bowel, as by worms, in children, may bring out the eruption. Sudden emotion or mental excitement in certain persons may also produce it. In females menstrual and uterine difficulties may cause urticaria. The disease is intimately connected with the nervous system, and patients who suffer from chronic urticaria are apt to be persons of more or less depraved nervous organization.

The diagnosis of urticaria does not often present any difficulty, because the lesions are so peculiar in appearance, and because of the peculiar burning and tingling sensations. The small lesions, as found in children, may be mistaken for eczema, but a few scratches with the finger nail on the skin of any part of the body will arouse urticarial red or white bands and streaks, which show an irritable condition of the skin and are very characteristic.

The treatment of urticaria depends greatly, for its success, upon the discovery and removal of the cause. When this is suspected to be some gastric disturbance, the precise articles of food of which the patient has been partaking should be inquired into ; their quality, as to freshness, etc., should also be a matter of scrutiny. The possibility of the patient having eaten anything unusual should also be considered, as well as the previous ingestion of medicine. An emetic may be given in acute cases, if the contents of the stomach have been recently ingested, and are suspected of being the cause. The bowels also should be freely opened by a saline purgative. The diet should be of the most simple and unstimulating character, and the subsequent internal treatment should be directed against the digestive difficulty. The treatment in any given case must depend upon the result of a careful investigation into its nature and cause.

Among medicines the laxative mineral waters are often advantageous ; Hunyadi Janos, Ofener Racoczy, Friedrichshall or Hathorn ; the latter preferably drunk at the spring in Saratoga. The alkaline waters, as Vichy or Saratoga Vichy, may also at times be used with advantage. Diuretics are often of use. Quinia is a most useful remedy, whether malaria be present or not. Arsenic is sometimes of service when other remedies fail. Iron also is useful. The "Mistura ferri acida," already several times referred to, is a very useful

remedy in many cases of urticaria. The formula may be given again here:—

R. Magnesii Sulphat.....	℥j
Ferri Sulphat.....	gr. iv
Sodii Chloridi	℥ss
Acidi Sulphurici, dil.....	f℥ij
Infus. Quassiae.....ad.....	f℥iv. M.

SIG.—Tablespoonful in a tumbler of water, before breakfast.

Bromide of potassium, chloral and other sedatives may be required, to give rest and calm to the nervous system, often injured by long-continued suffering. The preparations of opium should generally be avoided. Among other remedies, to be tried in difficult cases, may be mentioned the following: Sulphate of atropia, in doses of $\frac{1}{100}$ to $\frac{1}{80}$ grain, morning and evening; sulphurous acid, in drachm doses, diluted with simple syrup; salicylic acid, in 20-grain doses, thrice daily, and chloride of ammonium, in 10- to 20-grain doses, thrice daily. All of these I have been obliged to use at one time or another, and I have used each with satisfaction.

External treatment is of importance to calm the burning and tingling pain of the eruption, which is at times almost unendurable. Alkaline baths, followed by soothing powders, such as are described under the treatment of acute eczema, will be of use. Sponging with vinegar and water, or alcohol, alone or diluted, often gives relief; it should be used frequently. Carbolic acid, three drachms, with an ounce of glycerine in a pint of water, is an excellent wash. Chloroform, a drachm to the ounce of alcohol, or a drachm to the ounce of cold cream, is very good. Dilute ammonia water is useful in some cases. Occasionally a saturated solution of benzoic acid in water (℥ss ad Oj) is effectual. When one local remedy fails, another should be tried. Irritating under-clothing should be avoided, and the patient should sleep in a cool room, with light bed covering.

The prognosis in urticaria varies in each case. If the cause is a temporary gastric derangement, its removal will soon result in a cure. If, however, the urticaria is chronic and dependent upon some derangement of the nervous, digestive or generative system of long standing, it is apt to prove very stubborn.

Vaccination, Skin Diseases Following. In addition to the inoculation of syphilis by vaccination, an event of such rare occurrence as not to require description in the present work, there are several skin affections which appear to arise as a result of a general irritation in predisposed constitutions, which are worthy of note. These assume the following forms : 1. *Erythema vaccinia* (already described under *Erythema*). 2. A *herpetiform* eruption, which shows itself in the form of a number of closely-grouped vesicles, appearing on the third day after vaccination, at the seat of the operation, surrounded by a red areola and itching severely. Sometimes eczema, with swelling of the axillary glands, results. It is apt to occur in weakly or anæmic children. 3. A *pemphigoid* eruption, when a bulla forms, instead of the usual vesicle, at the seat of inoculation. This may be followed by ulceration and cicatrization. It occasionally occurs as an epidemic. 4. A *furunculoid* eruption, in which red tubercles as large as peas appear at the seat of vaccination. These tubercles afterward suppurate. They correspond to ordinary follicular furuncles. 5. *Vaccinal erysipelas* sometimes makes its appearance, usually on the seventh to the tenth day after vaccination. It consists in the formation of a broad, red ring, which rapidly increases in extent. It is attended with swelling, tension and pain, and presents the usual characters of erysipelas. It sometimes spreads down the forearm, or even as far as the fingers, or up the arm to the axilla and chest. It is, of course, accompanied by general febrile and other symptoms. 6. *Vaccinal ulcers* sometimes occur, in

place of the ordinary evolution of the vaccine vesicle. These are due to the setting up of a very intense morbid process in the skin of the part, rather than to any particular idiosyncrasy of the person vaccinated, or to any specific change in the blood. 7. *Gangrene* has been known to occur in weakly children, the crusts being converted, on the twenty-fifth day after vaccination, into a black, fetid, gangrenous eschar. In one case reported, death ensued.

Vegetations. (See *Verruca* and *Syphilis, skin diseases due to.*)

Venereal Wart. (See *Verruca.*)

Vernix Caseosa. (See *Seborrhœa.*)

Verruca (iv), or wart, presents itself in several different forms. In addition to the common wart, as met with on the hands and elsewhere, there is a flat variety, usually about the size of the finger nail, and only slightly elevated above the level of the skin. This is apt to be met with on the face and on the backs of the hands, and, from being found most frequently in elderly people, is called *verruca senilis*. Besides these forms of wart, there is the *verruca acuminata*, or pointed wart, consisting of one or more groups of acuminated or irregularly-shaped elevations, composed of greatly elongated papillæ of the skin, usually packed together so as to form a more or less solid mass of "vegetations." The individual prominences may be pointed, clubbed, or more or less sessile or pedunculated. In color, they are pinkish or reddish, bright red or purplish, depending on their situation and vascularity. They are apt to occur about the genitalia (penis and labia) of both sexes. Upon the penis, they generally spring from the glans and inner surface of the prepuce. Upon the female, they generally spring from the inner surface of the labia and vagina. They are also found about the anus, mouth, axillæ, umbilicus and toes. About the genitalia their surface is usually moist, and they exhale a disgusting odor,

due to the decomposition of the secretions on their surface. They grow rapidly, and may attain large size and assume grotesque and misshapen forms.

The causes of warts are obscure. The acuminate variety, as it occurs on the genitals, is often, but by no means always, venereal in origin, and may be due to the irritation of acrid discharges, as gonorrhœa. *They are never a manifestation of syphilis*, and the vegetating syphiloderm must not be confounded with the growth under consideration. The wart is simply an hypertrophy of the papillæ, the connective tissue element being more prominent in the pointed variety, or condyloma.

Small warts may be clipped off with curved scissors, the base being touched with nitrate of silver stick. The dermal curette or scraping spoon may also be employed. The ligature, *écraseur* or galvano-caustic wire may be employed in the larger, vascular variety. Venereal warts about the labia are best treated by washing the parts with dilute liquor sodæ chlorinatæ, and afterwards dusting the surface with powdered calomel, or a powder composed of equal parts of burnt alum and savin. Glacial acetic, nitric, chromic or carbolic acids may be used. The larger condylomata may be attacked by a Paquelin's cautery. Common warts may be cauterized by one of the acids mentioned, or by means of caustic potash, in stick or solution. Tincture of the chloride of iron is sometimes used successfully. The following prescription is in vogue at the present time. It answers excellently in many cases:—

R.	Ext. Cannabis Indicæ.....	gr. x	
	Acid Salicylici.....	℥ ^{ss}	
	Collodii.....	℥j.	M.

Apply daily, for three or four days, and then scrape the wart, and if necessary apply again.

For patches of warts the following paste may be used, only

not covering too much ground at a time, for fear of absorption:—

R. Pulv. Acidi Arseniosi..... gr. vj
 Ung. Hydrarg.
 Empl. Hydrarg., q.s., ad.. ʒij. M.

The mixture should be made into a soft plaster, and applied on thin kid. The warts melt down gradually under its use.

Now and then warts resist all treatment, or spring up as fast as removed. In such cases arsenic may be given with some hope of preventing the recurrence of the growths. It should be administered for months, as its action is only slowly felt in the economy. Occasionally the presence of warts seems due to some nervous or constitutional influence, and they stubbornly resist all treatment.

Verruca Necrogenica. (See *Dissection wound*.)

Vitiligo (v) shows itself in the form of one or more, usually sharply defined, rounded, ovalish or irregularly-shaped, variously-sized and distributed, smooth, whitish spots, around the borders of which the surrounding skin shows an increase of pigment. The number of spots is usually not numerous; they are smooth and on a level with the surrounding skin, and save for the discoloration cannot be distinguished from it. The texture of the affected skin is indeed normal, except that the amount of pigment has diminished, a diminution which extends to the hairs growing on it, which usually turn white. The disease is popularly known as “piebald skin,” and when occurring in the negro, has sometimes given rise to the notion that the skin was turning white, like that of a Caucasian. The disease is striking and disfiguring. It sometimes disappears spontaneously after years, but treatment has little effect. Arsenic is the only remedy which, in my experience, has had a good effect, when used for months. Treatment, however, on the whole, is unsatisfactory. The disease is sometimes mistaken for *Morphæa*, *Macular leprosy*

and *Chloasma*. A reference to the description of these diseases will show wherein they differ.

Wart. (See *Verruca*.)

Wen. (See *Sebaceous cyst*.)

Xanthelasma. (See *Xanthoma*.)

Xanthoma (vi) is characterized by the formation of yellowish, pea-sized or larger, patches of various sizes, either flat with the skin or in tubercles and raised masses. The flat variety generally occurs on the eyelids, when the patches look like bits of chamois skin inserted in the lid. The tubercular form occurs usually elsewhere than on the eyelids. The lesions of both varieties are usually single or few in number, but are now and then numerous. They rarely give rise to any sensation but occasionally pain slightly. They used to be thought connected in some way with disease of the liver, but such connection has never been proved. The treatment is excision.

Xeroderma. (See *Ichthyosis* and *Atrophy of the skin*.)

Yaws. (See *Frambæsia*.)

Zoster—Zona. (See *Herpes zoster*.)

APPENDIX.

DIET IN DISEASES OF THE SKIN.

While there are many diseases of the skin which are purely local processes, or which are dependent upon general causes beyond the present ability of medical art to obviate, there are others, and among these some of the most important, as eczema, urticaria, acne, etc., in the management of which hygiene and dietetics play a most important part. Some allusion has been made to this point in treating of the various diseases in the foregoing pages, but it has seemed desirable to draw further attention to the subject in this place, and to give some general suggestions and hints which may be developed to suit the individual case.

And first, with reference to the part of the physician in giving counsel on this matter. The time spent in interrogating the patient with reference to his hours of meals, habits of eating, favorite foods and drinks, the effects of different articles of diet upon his digestion, so far as he may have observed himself in this matter, etc., is by no means lost. Having formed an opinion as to the condition of the digestive organs, so far as stomachal digestion is concerned, the inquiry should be pushed further, and the intestinal digestion and habits of defecation should be examined into. In many cases the simple knowledge of the existence of constipation or diarrhœa, or of the regular performance of defecation, is all that is necessary, but in some instances it may be desirable to push the inquiry further.

Having come to a conclusion as to the points at fault, full

and explicit directions as to diet and regimen are to be given the patient, as a great deal depends upon the care and thoroughness with which the physician's advice is followed. The exact diet suitable to the individual must be decided upon and enforced in such terms as to leave no doubt in the patient's mind as to the importance of every detail. Generalities in the way of directions, with a careless indication, in broad terms, of the articles of diet to be used and avoided, are not likely to produce a serious impression on the patient's mind, and the failure to amend is followed by a general despondency and distrust of all remedies.

It is obviously impossible, even if this were the place, to give a complete disquisition on diet in dyspepsia and weak digestion. Each case must be treated on its own merits. Inquiry should be made as to the particular articles of food which agree, so as to ascertain the form of dyspepsia which is present. I think it advisable, in many cases, to give the patient a list of such articles of diet as are commonly found upon our tables, marking such as are deemed suitable or unsuitable, and making such changes subsequently as the experience of the patient indicates. This list is arranged as follows:—

DIGESTIBLE FOODS.

Meats. Sweet bread, plainly cooked. Chicken and turkey (white meat). Venison. Partridge. Pheasant. Pigeon (squab). Wild duck. Rabbit. Lamb, roast, stewed or in broiled chops. Mutton, roast or in broiled chops. Beef, roast or in rare tenderloin steak. Eggs, soft boiled. Tripe. Oysters, raw, roast, broiled or stewed (always rejecting the "eyes"). Fresh fish, especially trout, perch and flounders. Meat broths and clear soups, carefully made, not rich, and without vegetables.

Vegetables. Rice. Maccaroni. Spinach. Tomatoes (stewed). Peas (fresh and young). Beans (Lima, French

and string, young and fresh). Squash. Carrots (young). Asparagus. Oyster Plant or Salsify (stewed). Mushrooms. Beets. Okras.

Bread, etc. Dry and milk toast. Zwiebach. Toasted rusk. Steamed crackers. Wheat bread, rather stale, and preferably the crust). Rolls. Graham bread.

Beverages. Coca, made from the nibs. Weak Tea, with a slice of lemon instead of sugar and cream. Coffee, with a raw, beaten egg instead of milk, sweetened with sugar or extract of malt. Milk in small quantities at a time. Apollinaris water.

QUESTIONABLE FOODS,

Such as are borne by some weak digestions, while disagreeing with others or at certain times.

Meats. Reed birds. Duck. Black meat of chicken or turkey. Omelette. Scrambled eggs.

Vegetables. Potatoes, white. Parsnips. Stewed Celery. Raw Celery. Hominy. Egg Plant. Water-cress. Onions. Foreign fruits, as Bananas, Oranges and Grapes. (The usual summer fruits, when perfectly fresh and in season, agree with almost every one.)

Bread, etc. Fresh wheat bread. Graham bread and biscuit, when hot and fresh. Oatmeal mush. Indian mush. Cracked wheat.

Puddings (boiled and baked), as custard, bread, farina, corn starch, tapioca, etc. Stewed fruits. Curds and cream. Plain cakes, as rusk, bun, etc. Ice cream.

Fluids. Coffee and Tea, strong, with sugar and cream. Chocolate, as usually prepared. Lemonade. Ginger ale, and the like.

INDIGESTIBLE FOODS,

Such as are commonly found to disagree with persons of weak digestion, or suffering from the various forms of dyspepsia.

Meats. Ham. Pork in any shape. Sausage. Corned beef. Dried beef. Veal. Goose. Kidneys. Liver.

Salt fish or smoked fish, as Cod. Mackerel. Salmon or herring.

Shell fish, as Lobsters. Crabs. Clams, and the "eyes" of oysters.

Hard boiled eggs.

Vegetables. Cabbage. Sauer-kraut. Cauliflower. Lettuce and salads of all sorts. Cucumbers. Pickles. Corn. Raw celery. White potatoes, (new). Sweet potatoes. Dried fruits, as Raisins. Figs, etc. Nuts. Water ices. Preserves.

Bread, etc. Hot bread, and especially hot griddle, and other breakfast cakes. Fritters. Dumplings. Puddings of boiled flour. Pastry of all sorts, and rich cakes. Cheese.

Fluids. Alcoholic and malt liquors of all kinds generally disagree with dyspeptics, and should not be taken except as prescribed. Syrups and gaseous beverages are also unwholesome.

In a general way salted and fried foods are to be avoided. Also too much fat; but butter, which is one of the most digestible fats, and which to most people adds a zest to restricted diet, should in almost all cases be permitted. Pickles, preserves, and candied or dried fruits, should be prohibited. Patients should be instructed (for this advice is often required), to eat slowly, chew carefully, and not to deluge the stomach with water or other fluids during meal time, especially at the beginning.

In cases of actual dyspepsia, considerable comfort is often gained by dividing the animal from the vegetable food, taking one at one meal, and the other at another. Vegetable food is much less likely to cause flatulence if taken alone.

CATALOGUE No. 7.



A CATALOGUE
OF
BOOKS FOR STUDENTS;

INCLUDING A FULL LIST OF

The ? Quiz-Compend?

AND MANY OF

THE MOST PROMINENT

Students' Manuals and Text-Books

PUBLISHED BY

P. BLAKISTON, SON & CO.,

Medical Booksellers, Importers and Publishers,

NO. 1012 WALNUT STREET,

PHILADELPHIA.

. For sale by all Booksellers, or any book will be sent by mail, postpaid, upon receipt of price. Catalogues of books on all branches of Medicine, Dentistry, Pharmacy, etc., supplied upon application.

THE ?QUIZ-COMPENDS?

A NEW SERIES OF COMPENDS FOR STUDENTS.

For Use in the Quiz Class and when
Preparing for Examinations.

Price of Each, Bound in Cloth, \$1.00 Interleaved, \$1.25.

Based on the most popular text-books, and on the lectures of prominent professors, they form a most complete set of manuals, containing information nowhere else collected in such a condensed, practical shape. The authors have had large experience as quiz masters and attachés of colleges, with exceptional opportunities for noting the most recent advances and methods. The arrangement of the subjects, illustrations, types, etc., are all of the most improved form, and the size of the books is such that they may be easily carried in the pocket.

No. 1. ANATOMY. (Illustrated.)

THIRD REVISED EDITION.

A Compend of Human Anatomy. By SAMUEL O. L. POTTER, M.A., M.D., U. S. Army. With 63 Illustrations.

"The work is reliable and complete, and just what the student needs in reviewing the subject for his examinations."—*The Physician and Surgeon's Investigator*, Buffalo, N. Y.

"To those desiring to post themselves hurriedly for examination, this little book will be useful in refreshing the memory."—*New Orleans Medical and Surgical Journal*.

"The arrangement is well calculated to facilitate accurate memorizing, and the illustrations are clear and good."—*North Carolina Medical Journal*.

Nos. 2 and 3. PRACTICE.

A Compend of the Practice of Medicine, especially adapted to the use of Students. By DAN'L E. HUGHES, M.D., Demonstrator of Clinical Medicine in Jefferson Medical College, Philadelphia. In two parts.

PART I.—Continued, Eruptive, and Periodical Fevers, Diseases of the Stomach, Intestines, Peritoneum, Biliary Passages, Liver, Kidneys, etc., and General Diseases, etc.

PART II.—Diseases of the Respiratory System, Circulatory System, and Nervous System; Diseases of the Blood, etc.

. These little books can be regarded as a full set of notes upon the Practice of Medicine, containing the

THE ? QUIZ-COMPENDS ?

Synonyms, Definitions, Causes, Symptoms, Prognosis, Diagnosis, Treatment, etc., of each disease, and including a number of new prescriptions. They have been compiled from the lectures of prominent Professors, and reference has been made to the latest writings of Professors FLINT, DA COSTA, REYNOLDS, BARTHOLOW, ROBERTS and others.

"It is brief and concise, and at the same time possesses an accuracy not generally found in compends."—*Jas. M. French, M.D., Ass't to the Prof. of Practice, Medical College of Ohio, Cincinnati.*

"The book seems very concise, yet very comprehensive. . . . An unusually superior book."—*Dr. E. T. Bruen, Demonstrator of Clinical Medicine, University of Pennsylvania.*

"I have used it considerably in connection with my branches in the Quiz-class of the University of La."—*J. H. Bemiss, New Orleans.*

"Dr. Hughes has prepared a very useful little book, and I shall take pleasure in advising my class to use it."—*Dr. George W. Hall, Professor of Practice, St. Louis College of Physicians and Surgeons.*

No. 4. PHYSIOLOGY.

A Compend of Human Physiology, adapted to the use of Students. By ALBERT P. BRUBAKER, M.D., Demonstrator of Physiology in Jefferson Medical College. Philadelphia.

"Dr. Brubaker deserves the hearty thanks of medical students for his *Compend of Physiology*. He has arranged the fundamental and practical principles of the science in a peculiarly inviting and accessible manner. I have already introduced the work to my class."—*Maurice N. Miller, M.D., Instructor in Practical Histology, formerly Demonstrator of Physiology, University City of New York.*

"'Quiz-Compend' No. 4 is fully up to the high standard established by its predecessors of the same series."—*Medical Bulletin, Philadelphia.*

"I can recommend it as a valuable aid to the student."—*C. N. Ellinwood, M.D., Professor of Physiology, Cooper Medical College, San Francisco.*

"This is a well written little book."—*London Lancet.*

No. 5. OBSTETRICS.

A Compend of Obstetrics. For Physicians and Students. By HENRY G. LANDIS, M.D., Professor of Obstetrics and Diseases of Women, in Starling Medical College, Columbus. Illustrated.

"We have no doubt that many students will find in it a most valuable aid in preparing for examination."—*The American Journal of Obstetrics.*

"It is complete, accurate and scientific. The very best book of its kind I have seen."—*J. S. Knox, M.D., Lecturer on Obstetrics, Rush Medical College, Chicago.*

Price of each Book, Cloth, \$1.00. Interleaved for Notes, \$1.25.

THE ? QUIZ-COMPENDS ?.

"I have been teaching in this department for many years, and am free to say that this will be the best assistant I ever had. It is accurate and comprehensive, but brief and pointed."—*Prof. P. D. Yost, St. Louis.*

No. 6. MATERIA MEDICA. Revised Ed.

A Compend on Materia Medica and Therapeutics, with especial reference to the Physiological Actions of Drugs. For the use of Medical, Dental, and Pharmaceutical Students and Practitioners. Based on the New Revision (Sixth) of the U. S. Pharmacopœia, and including many unofficinal remedies. By SAMUEL O. L. POTTER, M.A., M.D., U. S. Army.

"I have examined the little volume carefully, and find it just such a book as I require in my private Quiz, and shall certainly recommend it to my classes. Your Compend is all popular here in Washington."—*John E. Brackett, M.D., Professor of Materia Medica and Therapeutics, Howard Medical College, Washington.*

"Part of a series of small but valuable text-books. . . . While the work is, owing to its therapeutic contents, more useful to the medical student, the pharmaceutical student may derive much useful information from it."—*N. Y. Pharmaceutical Record.*

No. 7. CHEMISTRY. Revised Ed.

A Compend of Chemistry. By G. MASON WARD, M.D., Demonstrator of Chemistry in Jefferson Medical College, Philadelphia. Including Table of Elements and various Analytical Tables.

"Brief, but excellent. . . . It will doubtless prove an admirable aid to the student, by fixing these facts in his memory. It is worthy the study of both medical and pharmaceutical students in this branch."—*Pharmaceutical Record, New York.*

No. 8. VISCERAL ANATOMY.

A Compend of Visceral Anatomy. By SAMUEL O. L. POTTER, M.A., M.D., U. S. Army. With 40 Illustrations.

. This is the only Compend that contains full descriptions of the viscera, and will, together with No. 1 of this series, form the only complete Compend of Anatomy published.

No. 9. SURGERY. Illustrated.

A Compend of Surgery; including Fractures, Wounds, Dislocations, Sprains, Amputations and other operations, Inflammation, Suppuration, Ulcers, Syphilis, Tumors, Shock, etc. Diseases of the Spine, Ear, Eye, Bladder, Testicles, Anus, and other Surgical Diseases. By ORVILLE HORWITZ, A.M., M.D., with 43 Illustrations.

Price of Each, Cloth, \$1.00. Interleaved for Notes, \$1.25.

No. 10. ORGANIC CHEMISTRY.

JUST PUBLISHED.

A Compend of Organic Chemistry, including Medical Chemistry, Urine Analysis, and the Analysis of Water and Food, etc. By HENRY LEFFMANN, M.D., Professor of Clinical Chemistry and Hygiene in the Philadelphia Polyclinic; Professor of Chemistry, Pennsylvania College of Dental Surgery; Member of the N. Y. Medico-Legal Society. Cloth. \$1.00.
Interleaved, for the addition of Notes, \$1.25.

Nature of Organic Bodies. Transformations under various conditions. Organic Synthesis. Homologous and Isomeric Bodies. Empirical and Rational formulæ. Classification of Organic Bodies. Hydrocarbon. Derivatives of Hydrocarbons, Alcohols and Ethers. Benzenes and Turpenes. Fat Acids, Oils and Fats, Sugars, Glucosides. Cyanogen Compounds. Amines and Amides. Alkaloids. Ptomaines. Animal Chemistry. Nutrition and Assimilation. Food, Water and Air. Urinary Analysis. Index.

The Essentials of Pathology.

BY D. TOD GILLIAM, M.D.,

Professor of Physiology in Starling Medical College, Columbus, O.

With 47 Illustrations. 12mo. Cloth. Price \$2.00.

*.*The object of this book is to unfold to the beginner the fundamentals of pathology in a plain, practical way, and by bringing them within easy comprehension to increase his interest in the study of the subject. Though it will not altogether supplant larger works, it will be found to impart clear-cut conceptions of the generally accepted doctrines of the day, and to prevent confusion in the mind of the student.

A POCKET-BOOK OF

PHYSICAL DIAGNOSIS

OF THE

Diseases of the Heart and Lungs.

A MANUAL FOR STUDENTS AND PHYSICIANS.

BY DR. EDWARD T. BRUEN,

Demonstrator of Clinical Medicine in the University of Pennsylvania, Assistant Physician to the University Hospital, etc.

Second Edition, Revised. With new Illustrations. 12mo. \$1.50.

*.*The subject is treated in a plain, practical manner, avoiding questions of historical or theoretical interest, and without laying special claim to originality of matter, the author has made a book that presents the somewhat difficult points of Physical Diagnosis clearly and distinctly.

STUDENTS' MANUALS.

TYSON, ON THE URINE. A Practical Guide to the Examination of Urine. For Physicians and Students. By JAMES TYSON, M.D., Professor of Pathology and Morbid Anatomy, University of Pennsylvania. With Colored Plates and Wood Engravings. Fourth Edition. 12mo, cloth, \$1.50

HEATH'S MINOR SURGERY. A Manual of Minor Surgery and Bandaging. By CHRISTOPHER HEATH, M.D., Surgeon to University College Hospital, London. 6th Edition. 115 Ill. 12mo, cloth, \$2.00

MACNAMARA, ON THE EYE. A Manual for Students and Physicians. 4 Colored Plates and 65 Wood Engravings. Demi 8vo. Cloth, \$4.00.

VIRCHOW'S POST-MORTEM. Post-Mortem Examinations. A Description and Explanation of the Methods of Performing them. By PROF. RUDOLPH VIRCHOW, of Berlin. Translated by DR. T. B. SMITH. 2d Ed. 4 Lithographic Plates. 12mo, cloth, \$1.25

DULLES' ACCIDENTS AND EMERGENCIES. What To Do First in Accidents and Emergencies. A Manual Explaining the Treatment of Surgical and other Accidents, Poisoning, etc. By CHARLES W. DULLES, M.D., Surgeon Out-door Department, Presbyterian Hospital, Philadelphia. Colored Plate and other Illustrations. 32mo, cloth, .75

BEALE, ON SLIGHT AILMENTS. Their Nature and Treatment. By LIONEL S. BEALE, M.D., F.R.S. Second Edition. Revised, Enlarged and Illustrated. 283 pages. 8vo.

Paper covers, 75 cents; cloth, \$1.25

ALLINGHAM, ON THE RECTUM. Fistulæ, Hemorrhoids, Painful Ulcer, Stricture, Prolapsus, and other Diseases of the Rectum; Their Diagnosis and Treatment. By WM. ALLINGHAM, M.D. Fourth Revised and Enlarged Edition. Illustrated. 8vo.

Paper covers, 75 cents; cloth, \$1.25

AITKEN, THE SCIENCE AND PRACTICE OF MEDICINE. A New (Seventh) Edition. 2 Vols. 8vo. Cloth, \$12.00; Leather, \$14.00.

STUDENTS' MANUALS AND LEXICONS.

MARSHALL AND SMITH, ON THE URINE.

The Chemical Analysis of the Urine. By JOHN MARSHALL, M.D., Chemical Laboratory, University of Pennsylvania, and PROF. E. F. SMITH. Illus. Cloth, \$1.00

MEARS' PRACTICAL SURGERY.

Surgical Dressings, Bandaging, Ligation, Amputation, etc. By J. EWING MEARS, M.D., Demonstrator of Surgery in Jefferson Med. College. 227 Illus. 2d Ed. *In Press.*

KIRKE'S PHYSIOLOGY.

A Handbook for Students. Eleventh Edition, 1884. 466 Illustrations. Demi 8vo. Cloth, \$5.00.

TYSON, ON THE CELL DOCTRINE;

its History and Present State. By PROF. JAMES TYSON, M.D. Second Edition. Illustrated. 12mo, cloth, \$2.00

MEADOWS' MIDWIFERY.

A Manual for Students. By ALFRED MEADOWS, M.D. From Fourth London Edition. 145 Illustrations. 8vo, cloth, \$2.00

WYTHE'S DOSE AND SYMPTOM BOOK.

Containing the Doses and Uses of all the principal Articles of the Materia Medica, etc. Eleventh Edition. 32mo, cloth, \$1.00; pocket-book style, \$1.25

PHYSICIAN'S PRESCRIPTION BOOK.

Containing Lists of Terms, Phrases, Contractions and Abbreviations used in Prescriptions, Explanatory Notes, Grammatical Construction of Prescriptions, etc., etc. By PROF. JONATHAN PEREIRA, M.D. Sixteenth Edition. 32mo, cloth, \$1.00; pocket-book style, \$1.25

POCKET LEXICONS.

CLEAVELAND'S POCKET MEDICAL LEXICON.

A Medical Lexicon, containing correct Pronunciation and Definition of Terms used in Medicine and the Collateral Sciences. Thirtieth Edition. Very small pocket size. Red Edges.

Cloth, 75 cents; pocket-book style, \$1.00

LONGLEY'S POCKET DICTIONARY.

The Student's Medical Lexicon, giving Definition and Pronunciation of all Terms used in Medicine, with an Appendix giving Poisons and Their Antidotes, Abbreviations used in Prescriptions, Metric Scale of Doses, etc. 24mo, cloth, \$1.00; pocket-book style, \$1.25

ROBERTS' PRACTICE.

FIFTH EDITION.

Recommended as a Text-book at University of Pennsylvania, Long Island College Hospital, Yale and Harvard Colleges, Bishop's College, Montreal, University of Michigan, and over twenty other Medical Schools.

A HANDBOOK OF THE THEORY AND PRACTICE OF MEDICINE. By FREDERICK T. ROBERTS, M.D., M.R.C.P., Professor of Clinical Medicine and Therapeutics in University College Hospital, London. Fifth Edition. Octavo.

CLOTH, \$5.00; LEATHER, \$6.00.

*** This new edition has been subjected to a careful revision. Many chapters have been rewritten. Important additions have been made throughout, and new illustrations introduced.

"A clear, yet concise, scientific and practical work. It is a capital compendium of the classified knowledge of the subject."—*Prof. J. Adams Allen, Rush Medical College, Chicago.*

"I have become thoroughly convinced of its great value, and have cordially recommended it to my class in *Yale College*."—*Prof. David P. Smith.*

"I have examined it with some care, and think it a good book, and shall take pleasure in mentioning it among the works which may properly be put in the hands of students."—*A. B. Palmer, Prof. of the Practice of Medicine, University of Michigan.*


"It is unsurpassed by any work that has fallen into our hands, as a compendium for students preparing for examination. It is thoroughly practical, and fully up to the times."—*The Clinic.*

BY SAME AUTHOR.

ROBERTS' NOTES ON MATERIA MEDICA AND PHARMACY.

Just Ready. 12mo. Cloth.

Price \$2.00.

 A new Compend for Students.

BIDDLE'S MATERIA MEDICA.

NINTH REVISED EDITION.

Recommended as a Text-book at Yale College, University of Michigan, College of Physicians and Surgeons, Baltimore, Baltimore Medical College, Louisville Medical College, and a number of other Colleges throughout the U. S.

BIDDLE'S MATERIA MEDICA. For the Use of Students and Physicians. By the late PROF. JOHN B. BIDDLE, M.D., Professor of Materia Medica in Jefferson Medical College, Philadelphia. The Ninth Edition, thoroughly revised, and in many parts rewritten, by his son, CLEMENT BIDDLE, M.D., Past Assistant Surgeon, U. S. Navy, assisted by HENRY MORRIS, M.D.

CLOTH, \$4.00; LEATHER, \$4.75.

"I shall unhesitatingly recommend it (the 9th Edition) to my students at the BELLEVUE HOSPITAL MEDICAL COLLEGE."—*Prof. A. A. Smith, New York, June, 1883.*

"The larger works usually recommended as text-books in our medical schools are too voluminous for convenient use. This work will be found to contain in a condensed form all that is most valuable, and will supply students with a reliable guide."—*Chicago Med. Jl.*

*** This Ninth Edition contains all the additions and changes in the U. S. Pharmacopœia, Sixth Revision.

STANDARD TEXT-BOOKS.

BLOXAM'S CHEMISTRY. Inorganic and Organic, with Experiments. Fifth Edition. Revised and Illustrated.

8vo, cloth, \$3.75; leather, \$4.75

CARPENTER ON THE MICROSCOPE and Its Revelations. Sixth Edition, Enlarged. With 500 Illustrations and Colored Plates, handsomely printed.

Demi 8vo, cloth, \$5.50

FLOWER, DIAGRAMS OF THE NERVES of the Human Body, Origin, Divisions, Connections, etc.

4to, cloth, \$3.50

GLISAN'S MODERN MIDWIFERY. A Text-book. 129 Illustrations.

8vo, cloth, \$4.00; leather, \$5.00

HOLDEN'S OSTEOLOGY. A Description of the Bones, with Colored Delineations of the Attachments of the Muscles. Sixth Edition. 61 Lithographic Plates and many Wood Engravings.

Royal 8vo, cloth, \$6.00

HEADLAND, THE ACTION OF MEDICINE in the System. Ninth American Edition.

8vo, cloth, \$3.00

MANN'S PSYCHOLOGICAL MEDICINE and Allied Nervous Diseases; including the Medico-Legal Aspects of Insanity. With Illustrations.

8vo, cloth, \$5.00; leather, \$6.00.

MEIGS AND PEPPER ON CHILDREN. A Practical Treatise on Diseases of Children. Seventh Edition, Revised.

8vo, cloth, \$6.00; leather, \$7.00

PARKES' PRACTICAL HYGIENE. Sixth Revised and Enlarged Edition. Illustrated.

8vo, cloth, \$3.00

RIGBY'S OBSTETRIC MEMORANDA. 32mo, cloth, .50

SANDERSON & FOSTER'S PHYSIOLOGICAL LABORATORY. A Handbook for the Laboratory. Over 350 Illustrations.

8vo, cloth, \$5.00; leather, \$6.00

WILSON'S HUMAN ANATOMY. General and Special. Tenth Edition. 26 Colored Plates and 424 Illustrations.

\$6.00

WYTHE'S MICROSCOPIST. A Manual of Microscopy and Compend of the Microscopic Sciences. Fourth Edition. 252 Illustrations.

8vo, cloth, \$3.00; leather, \$4.00

ACTON, ON THE REPRODUCTIVE ORGANS. Their Functions, Disorders and Treatment. 6th Edition. Cloth, \$2.00

FOTHERGILL, ON THE HEART. Its Diseases and their Treatment. Second Edition.

8vo, cloth, \$3.50

HARLEY ON THE LIVER. Diagnosis and Treatment. Colored Plates and other Illustrations. 8vo, cloth, \$5.00; sheep, \$9.00

HOLDEN'S ANATOMY. Fifth Edition.

JUST PUBLISHED.

A MANUAL OF THE DISSECTION OF THE HUMAN BODY.

By LUTHER HOLDEN, M.D., Late President of the Royal College of Surgeons of England, Consulting Surgeon to St. Bartholomew's Hospital. Fifth Edition; edited by JOHN LANGTON, M.D., F.R.C.S., Surgeon to, and Lecturer on Anatomy at, St. Bartholomew's Hospital; Member of the Board of Examiners, Royal College of Surgeons of England; with 208 fine Wood Engravings. Octavo. About 880 pages. Cloth, \$4.50; Leather, \$5.50.

REESE'S MEDICAL JURISPRUDENCE AND TOXICOLOGY.

A Text-book of Medical Jurisprudence and Toxicology. By JOHN J. REESE, M. D., Professor of Medical Jurisprudence and Toxicology in the Medical and Law Departments of the University of Pennsylvania; Vice-President of the Medical Jurisprudence Society of Philadelphia; Physician to St. Joseph's Hospital; Corresponding Member of the New York Medico-legal Society. One Volume. Demi Octavo. 606 pages. Cloth, \$4.00; Leather, \$5.00.

"PROFESSOR REESE is so well known as a skilled medical jurist that his authorship of any work virtually guarantees the thoroughness and practical character of the latter. And such is the case in the book before us. * * * * We might call these the essentials for the study of medical jurisprudence. The subject is skeletonized, condensed, and made thoroughly up to the wants of the general medical practitioner, and the requirements of prosecuting and defending attorneys. If any section deserves more distinction than any other, as to intrinsic excellence, it is that on toxicology. This part of the book comprises the best outline of the subject in a given space that can be found anywhere. As a whole, the work is everything it promises and more, and considering its size, condensation, and practical character, it is by far the most useful one for ready reference that we have met with. It is well printed and neatly bound.—*N. Y. Medical Record, Sept. 13th, 1884.*

RICHTER'S CHEMISTRY,

A TEXT-BOOK of INORGANIC CHEMISTRY for STUDENTS.

By PROF. VICTOR von RICHTER,

University of Breslau,

AUTHORIZED TRANSLATION FROM THE THIRD GERMAN EDITION,

By EDGAR F. SMITH, M.A., Ph.D.,

Professor of Chemistry in Wittenberg College, Springfield, Ohio; formerly in the Laboratories of the University of Pennsylvania; Member of the Chemical Society of Berlin.

12mo. 89 Wood-cuts and Col. Lithographic Plate of Spectra. \$2.00

In the chemical text-books of the present day, one of the striking features and difficulties we have to contend with is the separate presentation of the theories and facts of the science. These are usually taught apart, as if entirely independent of each other, and those experienced in teaching the subject know only too well the trouble encountered in attempting to get the student properly interested in the science and in bringing him to a clear comprehension of the same. In this work of PROF. VON RICHTER, which has been received abroad with such hearty welcome, two editions having been rapidly disposed of, theory and fact are brought close together, and their intimate relation clearly shown. From careful observation of experiments and their results, the student is led to a correct understanding of the interesting principles of chemistry.

In preparation, "ORGANIC CHEMISTRY," By the same author. Translated.

Just Published, September, 1884.

VAN HARLINGEN ON SKIN DISEASES.

A Handbook of the Diseases of the Skin, their Diagnosis and Treatment. By Arthur Van Harlingen, M.D., Professor of Diseases of the Skin in the Philadelphia Polyclinic, Consulting Physician to the Dispensary for Skin Diseases, etc. Illustrated by two colored lithographic plates.

12MO. 284 PAGES. CLOTH. PRICE \$1.75.

. This is a complete epitome of skin diseases, arranged in alphabetical order, giving the diagnosis and treatment in a concise, practical way. Many prescriptions are given that have never been published in any text-book, and an article incorporated on Diet. The plates do not represent one or two cases, but are composed of a number of figures, accurately colored, showing the appearance of various lesions, and will be found to give great aid in diagnosing.

BYFORD, DISEASES OF WOMEN.

NEW REVISED EDITION.

The Practice of Medicine and Surgery, as applied to the Diseases of Women. By W. H. BYFORD, A.M., M.D., Professor of Gynæcology in Rush Medical College; of Obstetrics in the Woman's Medical College; Surgeon to the Woman's Hospital; President of the American Gynæcological Society, etc. Third Edition. Revised and Enlarged; much of it Rewritten; with over 160 Illustrations. Octavo.

PRICE, CLOTH, \$5.00; LEATHER, \$6.00.

"The treatise is as complete a one as the present state of our science will admit of being written. We commend it to the diligent study of every practitioner and student, as a work calculated to inculcate sound principles and lead to enlightened practice"—*New York Medical Record*.

"The author is an experienced writer, an able teacher in his department, and has embodied in the present work the results of a wide field of practical observation. We have not had time to read its pages critically, but freely commend it to all our readers, as one of the most valuable practical works issued from the American press."—*Chicago Medical Examiner*.

MACKENZIE, THE THROAT AND NOSE.

By MORELL MACKENZIE, M.D., Senior Physician to the Hospital for Diseases of the Chest and Throat; Lecturer on Diseases of the Throat at the London Hospital, etc.

VOL. I. Including the PHARYNX, LARYNX, TRACHEA, etc. 112 Illustrations. Cloth, \$4.00; Leather, \$5.00

VOL. II. DISEASES OF THE ESOPHAGUS, NASAL CAVITIES AND NECK. Cloth, \$3.00; Leather, \$4.00

The two volumes at one time. Cloth, \$6.00; Leather, \$7.50

YEO'S PHYSIOLOGY.

A MANUAL FOR STUDENTS. JUST READY.

300 CAREFULLY PRINTED ILLUSTRATIONS.

FULL GLOSSARY AND INDEX.

By **GERALD F. YEO, M.D., F.R.C.S.**, Professor of Physiology in King's College, London. Small Octavo. 750 pages. Over 300 carefully printed Illustrations.

PRICE, CLOTH, \$4.00; LEATHER, \$5.00.

"By his excellent manual, Prof. Yeo has supplied a want which must have been felt by every teacher of physiology. * * * * In conclusion, we heartily congratulate Prof. Yeo on his work, which we can recommend to all those who wish to find within a moderate compass a reliable and pleasantly written exposition of all the essential facts of physiology as the science now stands."—*The Dublin Journal of Med. Science.*

"The work will take a high rank among the smaller text-books of Physiology."—*Prof. H. P. Bowditch, Harvard Med. School, Boston.*

"The brief examination I have given it was so favorable that I placed it in the list of text-books recommended in the circular of the University Medical College."—*Prof. Lewis A. Stimpson, M. D., 37 East 33d Street, New York.*

"For students' use it is one of the very best text-books in Physiology."—*Prof. L. B. How, Dartmouth Med. College, Hanover, N. H.*

RINDFLEISCH.

THE ELEMENTS OF PATHOLOGY.

TRANSLATED BY **WM. H. MERCUR, M.D.**

REVISED AND EDITED BY **PROF. JAS. TYSON,**
Of the University of Pennsylvania.

263 PAGES. CLOTH. PRICE \$2.00.

* * * It is the object of Prof. Rindfleisch to present in this volume of moderate size the fundamental principles of Pathology. A large number of the general processes which underlie disease, a knowledge of which is essential to the practical physician, are plainly presented. They include, among others, inflammation, tumor formation, fever, derangements of nutrition, including atrophy, derangements of the movement of the blood, of blood formation and blood purification, hyperæsthesia, anæsthesia, convulsions, paralysis, etc. The well-known reputation of the author, his thorough familiarity with and his method of treating the subject, make this most recent work peculiarly useful to the student, as well as to the practicing physician who wishes to brush up his pathology.

27.A.99.

Handbook of the diagnosis and t1884

Countway Library

AIY8934



3 2044 045 146 479

27.A.99.

Handbook of the diagnosis and t1884

Countway Library

AIY8934



3 2044 045 146 479